

Redhill Complex TK 5 Project - Pressure Test Log

ompany: NAVFAC	EȘC	Redhill Complex - NAVSTA Pearl Harbor	Location:	Location	: Project I	No.:	54118	<u> </u>	Date:	2/23/2010	thru	6/4/2013	3 r3	
uip. No. / Location	Test No.	Description T- 4	Test Media	Test Duration	ANSI Fig Class Rating	Design MAWP PS	Oper Pressure PSI	Max Op MAOP PSI	PSV Set Pressure PSI	Req'd Test PSI @ 150% MAOP	Reg'd Test PSI @ 110% PSV	High Test Press PSI Note (5)	Final Test Press PSI Note (1)(2)	Remarks
5 - Redhill Complex	1	Integrity Pressure Test 20" Inlet / 32" Internal Piping	Mater	45-	4504	At (2)	0.400.40	400	1111	450	100	-	7.0	
5 - Redhill Complex	2	12" Inlet / 16" Internal Piping	Water	4hr	150#	Almos (3)		100	N/A	150	N/A	N/A	150	Test 11/06/10 Pass
5 - Redhill Complex	3	6" Slop Line / Drain	Water	4hr	150#	Almos (3)		100	N/A	150	N/A	N/A	150	Test 11/02/10 Pass
5 - Redhill Complex	4	Sample Line 1 - 10'	Water	4hr	150#	Almos (3)		100	N/A	150	N/A	N/A	150	Test 10/11/10 Fail
	5	Sample Line 2 - 75'	Water	4hr	150#	Almos (3)		100	N/A	150	N/A	N/A	150	Test 10/07/10 Fail
5 - Redhill Complex	6	Sample Line 2 - 73 Sample Line 3 - 135'	Water	4hr	150#	Almos (3)	-	100	N/A	150	N/A	N/A	150	Test 10/08/10 Fail
5 - Redhill Complex	7	Sample Line 5 - 155	Water	4hr	150#	Almos (3)		100	N/A	150	N/A	N/A	150	Test 10/08/10 Fail
5 - Redhill Complex	1	Sample Line 4 - 190	Water	4hr	150#	Almos (3)	0-100 (4)	100	NIA	150	N/A	N/A	150	Test 10/08/10 Fail
	+	Repair / New Piping - Pressure Test			1				-					
5 - Redhill Complex	8	4" Slop Line / Drain - Internal	Water	4hr	150#	Atmos (3)	0-100 (4)	100	N/A	150	N/A	N/A	150	T 10/40/42 P
- Redhill Complex	9	Sample Line 1 - 20' - Internal	Water	4hr	150#	Atmos (3)	1	100	N/A	150	N/A	N/A	150	Test 10/19/12 Pass Test 10/19/12 Pass
- Redhill Complex	10	Sample Line 2 - 60' - Internal	Water	4hr	150#	Atmos (3)	1	100	N/A	150	N/A	N/A	12 2000000	AND UT DO HOUSE HAVE HAVE
5 - Redhill Complex	11	Sample Line 3 - 120' - Internal	Water	4hr	150#	Atmos (3)		100	N/A	1	-	7.12	150	Test 10/22/12 Pass
5 - Redhill Complex	12	Sample Line 4 - 180' - Internal	Water	4hr	150#	Control Control		100	N/A	150	N/A	N/A	150	Test 10/22/12 Pass
5 - Redhill Complex	13	4" Slop Line / Drain - External	Water	4hr	150#	Atmos (3)		100	N/A	150	N/A	N/A	150	Test 10/23/12 Pass
5 - Redhill Complex	14	Sample Lines & Header - External	Water	4hr	150#	Atmos (3)		100	N/A	150 150	N/A	N/A	150	Test 5/22/13 Pass
5 - Nedilli Complex	14	Sample Lines & Header * External	Avaies	401	190#	Atmos (3)	0-100 (4)	100	N/A	150	N/A	N/A	150	Test 5/22/13 Pass
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Note(s) -

- (1) The final test pressure is the greater of the two (2) test requirements.
 (2) Ensure test gauge(s) are located and the pressure(s) are adjusted to compensate for any elevation static head pressure.
- (3) Atmospheric Design & Static Head Pressure
- (4) Due to Static Head
- (5) High test pressure >2000 PSI or as specified by the Test Engineer, will require special depressuring and reinspection for potential structural changes or damage.



WILLBROS GOVERNMENT SERVICES (U.S.), LLC

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Pressure Test Certificate

PROJECT N62583-09-D-0132/0003	e 200	LOCATION TAN	IK 5	JOB NUMBER 54	1118	
CONTRACTOR WILLBROS GOVERNMENT SER	VICES	P & ID No.				
SERVICE NORMAL			N/	A		
TEST PACK NUMBER TANK 5 FINAL HYDRO 4"	DRAIN in CASING	DRAWING No.	54118-003	-07-400s		
SYSTEM NUMBER		700	711	3		
MARK No. N/A		ISO No.		5/5/	7.2	
LINE No.		67.54 C 75 - 154.5557	N	A		
4" DRAIN LINE						
LINE SPECIFICATION CASING SECTION		TEST MEDIUM	WATER			
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI	
STRESS RELIEVED YES NO	INTERNAL	LINING	YES NO			
ALL PRE-TEST NDE COMPLETE AND ACCEPTED	SIGNATURE			DATE		
MATERIAL RECORDS COMPLETE	SIGNATURE			DATE		
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	10	1	DATE		
PRE-TEST INSPECTION FOREMAN	N SIGNATURE	Chal SA	/	DATE 10	119/12	
WELDING OF PRESSURE PARTS COMPLETE	YES 2	SYSTEM FILLED A	AND PURGED OF A	10/3/20	YES	
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	ITHIN SPECIFICAT	70.000 CO	YES	
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPME	NT AND GAGES IN	SPECTED	YES	
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PRO	PERLY INSTRUCTE	D	YES	
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN	PLACE		YES	
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	AREA CLEARED OF PERSONEL YES				
TEST MEDIUM WITHIN SPECIFICATION	YES					
				78-30Z=87		
QUALITY CONTRO	L SIGNATURE			DATE		
PRESSURE TEST 4 HOUR DURATION	10/19/2012	2	AMBIENT 85 F	START 12:23 PM	FINISH 4:23 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND	CALIBRATION DAT	TE)	80			
4" CASING DRAIN LINE PASSED TESTING GA	AUGE #: 16531 CA	LIBRATION: 06/07	7/2012			
			Y	4085EC 800		
WGS. IA	MES HAGEN		W	GS- JOHN SEBO	nk .	
COMPANY.	(laso	2	a	Sil		
SIGNATI'RE	No.	.)	2000	John Sella	Į.	
OCTOB	<u>入口く 計入の</u> を ER 19th, 2012	N.		TOBER 19th, 20	TO 100 TO	
MATE.				TO DESTRUCTION OF THE PARTY OF		
POST HYDRO RESTORATION VES YES		Name of the State		ro cressor	YES	
HTDROBLOWN DOWN & DAT YES	-		CK VALVES INSTA		N/A	
HYDRO BEINDS POLLED YES			OS SEAL WELDED	ne de la composition della com	N/A	
PROPER GASKETS INSTALLED VES	-		AL WELDS COMPL		YES	
PROPER BOLTING & TIGHTNESS	-	DRAIN/VENT VA	LVES CLOSED & P	LUGGED		
Caracana market a second a 18 10	AMES HAGEN		14	Witnessed by	DK.	
	NIED FIAGEN		7/	IGS-JOHN SEBO	<i>/</i> /\	
SIGNATURE	177		Jul	John Schol	,	
BINDING ALARIN I				- 1 95 - 351		
	ER 19th, 2012	N		CTOBER 19th, 20	112	

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Pressure Test Certificate

PROJECT N62583-09-D-0132/0003		LOCATION TAN	K 5	JOB NUMBER	54118
CONTRACTOR WILLBROS GOVERNMENT SER	VICES	P & ID No.	- 5025 M	B	(Final Base)
SERVICE NORMAL			N	/A	
TEST PACK NUMBER. TANK 5 FINAL HYDRO EX	TERNAL 4" DRAIN	DRAWING No.	54118-00	3-07-400s	
SYSTEM NUMBER			1rC, 2	rC, 3rC	VAL 110
MARK No.		ISO No.	2 2000		
LINE No.	12 24 6 NEW 76 1	5 355 5 35_	4	I/A	
4" DRAIN LINE					20.00
LINE SPECIFICATION		TEST MEDIUM	WATER		
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI
STRESS RELIEVED YES NO	INTERNAL	LINING	YES NO		
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE			DATE	-
MATERIAL RECORDS COMPLETE	SIGNATURE	4		DATE	8.5
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	10	7 1	DATE	
PRE-TEST INSPECTION FOREMA	N SIGNATURE	Soul In	el (DATE 5	122/13
WELDING OF PRESSURE PARTS COMPLETE	YES	SYSTEM FILLED	ND PURGED OF	AIR	YES
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	TTHIN SPECIFICA	TION	YES
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPME	NT AND GAGES II	NSPECTED	YES
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PROI	ERLY INSTRUCT	ED	YES
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN	PLACE		YES
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	AREA CLEARED OF PERSONEL YES			
TEST MEDIUM WITHIN SPECIFICATION	YES	W 25 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 m		
8	8) 5	Webser Wil			
QUALITY CONTRO	L SIGNATURE		78	DATE	77 12
PRESSURE TEST 4 HOURS	DATE OF TEST 5/22/13	546	AMBIENT TEMP. 85 F	START 12:01 PM	FINISH 4:01 PM
COMMENTS—(TO INCLUDE GAUGE NUMBER AND 4° EXTERNAL DRAIN LINE PASSED TESTING G		SOURCE AC	5/2013	Witnessed by	
E Disputation 197	AMES HAGEN		1	WGS- OHN SE	вок
SIGNATURE //w~	· lety		, was and	al De	and a
PRINTNAME	// 1	240		John 5	ebok
100 100 DO 100 D	22nd, 2013	32		MAY 22nd, 20	13
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES		CONTROL & CHE HIGH POINT PLUG NDE ON PLUG SE	OS SEAL WELDED	& INSPECTED	YES
PROPER BOLTING & TIGHTNESS YES		DRAIN / VENT VA	LVES CLOSED &		YES
16179	AMES HAGEN			Witnessed by WGS, JOHN SE	and the second s
	AMES FIABER	- 3		JUNIO SE	DON .
SIGNATURE Gama	the		1 4	X Delle	11
PRINT NAME / JA : VI	Z HUCKU			106 -1	44 917
DATE MAY	22nd, 2013			MAY 22nd, 20	Lok

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Pressure Test Certificate

PROJECT N625	83-09-D-0132/0003		LOCATION TAN	NK TK5	JOB NUMBER	54118	
CONTRACTOR V	VILLBROS GOVERNMENT SER	VICES	P & ID No.				
SERVICE NORM	AL - ASME B31.3			1	V/A		
TEST PACK NUME	BER. TANK 5 DRAIN PIPING		DRAWING No.	N	ONE		
SYSTEM NUMBER					2.0000		
MARK No.	N/A		ISO No.				
LINE No.				ı	N/A		
	INTEGRITY TEST 6" PIPING			1	I/A		
LINE SPECIFICAT	TION SLOP LINE	3333	TEST MEDIUM	WATER			
DESIGN PRESSUI	RE (MAWP) 100	PSI	TEST PRESSURE	150		PSI	
STRESS RELIEVE	D YES NO	INTERNA	L LINING	YES NO			
ALL PRE- TEST NO	DE COMPLETE AND ACCEPTED	SIGNATURE			DATE		
MATERIAL RECO	ORDS COMPLETE	SIGNATURE			DATE		
WELDING HISTO	RY RECORDS COMPLETE	SIGNATURE		4414	DATE		
PRE-TEST INSPEC	TION FOREMAN	N SIGNATURE			DATE		
WELDING OF PRE	SSURE PARTS COMPLETE	N/A	SYSTEM FILLED	AND PURGED OF	AIR	YES	
PROPER GASKETS	, BOLTS AND BLINDS	YES	TEMPERATURE W	ITHIN SPECIFICA	TION	YES	
EMPORARY VENT'S AND DRAINS INSPECTED YES			HYDRO EQUIPME	YES			
TEST PLUGS INSPI	ECTED AND SECURED	YES HYDRO EQUIPMENT AND GAG YES OPERATORS PROPERLY INSTR				YES	
INSTUMENTATIO	N BLOCKED OR REMOVED	YES	BARRACADES IN PLACE AREA CLEARED OF PERSONEL YES				
VALVES IN THE R	IGHT POSITION (OPEN/CLOSED)	YES					
TEST MEDIUM WI	THIN SPECIFICATION	YES					
			800				
	QUALITY CONTROL	L SIGNATURE			DATE		
PRESSURE TEST	QUALITY CONTROL	DATE OF TEST	10	AMBIENT 73 F	START	FINISH	
DURATION	4 HOURS	DATE OF TEST 10/13/201		AMBIENT 73 F		FINISH 3:19 PM	
DURATION COMMENTS (TO		DATE OF TEST 10/13/201 CALIBRATION DA	ATE)	ILBIF.	START		
DURATION COMMENTS (TO	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA	DATE OF TEST 10/13/201 CALIBRATION DA	ATE)	ATION:	START 8:23 AM	3:19 PM	
DURATION COMMENTS (TO 6° DRAIN PIPING L	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE	ATE)	ATION:	START 8:23 AM	3:19 PM	
DURATION COMMENTS (TO 6° DRAIN PIPING L	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE	ATE)	ATION:	START 8:23 AM	3:19 PM	
DURATION COMMENTS (TO 6° DRAIN PIPING L COMPANY SIGNATURE	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE	ATE)	ATION:	START 8:23 AM	3:19 PM	
DURATION COMMENTS (TO 6° DRAIN PIPING L COMPANY SIGNATURE PRINT NAME	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA Insp WGS -	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE	ATE)	ATION:	START 8:23 AM	3:19 PM	
DURATION COMMENTS (TO 6° DRAIN PIPING L COMPANY SIGNATURE PRINT NAME	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS -	DATE OF TEST 10/13/201 CALIBRATION DO IN PRESSURE GAUGE Decid by Pat Collins	ATE)	ATION:	START 8:23 AM Witnessed by WGS - Reed Ca	3:19 PM	
DURATION COMMENTS (TO 6° DRAIN PIPING L COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY	DATE OF TEST 10/13/201 CALIBRATION DO IN PRESSURE GAUGE Decid by Pat Collins	ATE)	ATION:	START 8:23 AM Witnessed by WGS - Reed Ca	3:19 PM	
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES' HYDRO BLOWN D	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED YES	DATE OF TEST 10/13/201 CALIBRATION DO IN PRESSURE GAUGE Decid by Pat Collins	ATE) E#: 45-1279 #1 CALIBR	ATION: CK VALVES INST	Witnessed by WGS - Reed Ca	3:19 PM	
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES' HYDRO BLOWN D	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED INSTALLED YES INSTALLED	DATE OF TEST 10/13/201 CALIBRATION DO IN PRESSURE GAUGE Decid by Pat Collins	ATE) E#: 45-1279 #1 CALIBR. CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/13/2010 ALLED & INSPECTED	3:19 PM YES N/A N/A	
DURATION COMMENTS (TO 6" DRAIN PIPING L COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES' HYDRO BLOWN D HYDRO BLINDS PI PROPER GASKETS	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED SINSTALLED YES VES	DATE OF TEST 10/13/201 CALIBRATION DO IN PRESSURE GAUGE Decid by Pat Collins	ATE) E#: 45-1279 #1 CALIBR CONTROL & CHE HIGH POINT PLUC	CK VALVES INST	Witnessed by WGS - Reed Ca 10/13/2010 ALLED & INSPECTED LETE	3:19 PM avin YES N/A	
COMMENTS (TO 6° DRAIN PIPING L COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES' HYDRO BLOWN D HYDRO BLINDS PI	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED INSTALLED YES & TIGHTNESS YES	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE Perted by Pat Collins 13/2010	CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/13/2010 ALLED & INSPECTED LETE PLUGGED	3:19 PM YES N/A N/A YES	
COMMENTS (TO 6° DRAIN PIPING L COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES' HYDRO BLOWN D HYDRO BLINDS PI PROPER GASKETS PROPER BOLTING	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED INSTALLED YES & TIGHTNESS Inst	DATE OF TEST 10/13/201 CALIBRATION DO IN PRESSURE GAUGE Decid by Pat Collins	CONTROL & CHE	CK VALVES INST GS SEAL WELDED AL WELDS COMPI	Witnessed by WGS - Reed Ca 10/13/2010 ALLED & INSPECTED LETE	3:19 PM YES N/A N/A YES	
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RES' HYDRO BLOWN D HYDRO BLINDS PI PROPER GASKETS PROPER BOLTING	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED INSTALLED YES & TIGHTNESS Inst	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE Decreed by Pat Collins 13/2010	CONTROL & CHE	CK VALVES INST GS SEAL WELDED AL WELDS COMPI	Witnessed by WGS - Reed Ca 10/13/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	3:19 PM YES N/A N/A YES	
DURATION COMMENTS (TO	4 HOURS INCLUDE GAUGE NUMBER AND INE FAILED TESTING WOULDN'T MAINTA WGS - 10/ TORATION OWN & DRY ULLED INSTALLED YES & TIGHTNESS Inst	DATE OF TEST 10/13/201 CALIBRATION D. IN PRESSURE GAUGE Decreed by Pat Collins 13/2010	CONTROL & CHE	CK VALVES INST GS SEAL WELDED AL WELDS COMPI	Witnessed by WGS - Reed Ca 10/13/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	3:19 PM YES N/A N/A YES	



Pressure Test Certificate

NEGERA OF D 0123/0002							
PROJECT N62583-09-D-0132/0003		LOCATION TAN	K 5	JOB NUMBER	54118		
CONTRACTOR WILLBROS GOVERNMENT SER	RVICES	P& ID No.			NAME OF THE PARTY OF		
ERVICE NORMAL			N	/A	107000 a 10		
EST PACK NUMBER. TANK 5 FINAL HYDRO CASIN	NG SAMPLE PIPING	5 DRAWING No. 54118-003-07-400s					
YSTEM NUMBER			71	c			
ARK No. N/A		ISO No.					
INE No.			N	/A			
3/4" SAMPLE PIPING			N	/A			
LINE SPECIFICATION 20 FEET		TEST MEDIUM	WATER	10 Vo			
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI		
STRESS RELIEVED YES NO	INTERNAL	LINING	YES NO		SWICK ST EX.		
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE			DATE			
MATERIAL RECORDS COMPLETE	SIGNATURE			DATE			
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	1 7	4	DATE	4		
PRE-TEST INSPECTION FOREMA	N SIGNATURE	and Sel	1	DATE /	0/19/2		
WELDING OF PRESSURE PARTS COMPLETE	N/A 4	SYSTEM FILLED	ND PURGED OF A	IR	YES		
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	ITHIN SPECIFICA	TION	YES		
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPME			YES		
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PRO	PERLY INSTRUCTI	ED	YES		
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN	PLACE		YES		
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	AREA CLEARED C	F PERSONEL		YES		
TEST MEDIUM WITHIN SPECIFICATION	YES	• Electrical ad			22		
78277		-			19		
QUALITY CONTRO	OL SIGNATURE	- P		DATE			
				THE RESERVE AND ADDRESS OF THE PARTY OF THE			
PRESSURE TEST 4 HOURS	DATE OF TEST 10/19/2013	2	AMBIENT 85 F	start 7:25 AM	FINISH 11:25 AM		
PRESSURE TEST 4 HOURS	DATE OF TEST 10/19/2013 D CALIBRATION DA	TE)	85 F TEMP.	200 200 200 200 200	337243335		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531	TE)	85 F TEMP.	7:25 AM	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531	TE)	TEMP. 85 F	7:25 AM	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING LIN COMPANY. WGS- J.	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531	TE)	7/2012	7:25 AM Witnessed b	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE WGS-J	DATE OF TEST 10/19/201: D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	TE) CALIBRATION: 6/	7/2012	7:25 AM Witnessed by	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	TE) CALIBRATION: 6/	7/2012	7:25 AM Witnessed by NGS-JOHN 9	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME	DATE OF TEST 10/19/201: D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	TE) CALIBRATION: 6/	7/2012	7:25 AM Witnessed by	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	TE) CALIBRATION: 6/	7/2012	Witnessed by NGS-JOHN 9E	11:25 AM		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY A HOURS A HOURS LINE LINE LINE LINE LINE LINE LINE LIN	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	TE) CALIBRATION: 6/ E CONTROL & CHE	TEMP. 85 F	Witnessed by NGS-JOHN SE CTOBER 19th	11:25 AM BOK- 2012 YES		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU	TEMP. 85 F 7/2012 CCCK VALVES INST	Vinnesed IN NGS-JOHN SE CTOBER 19th	11:25 AM BOK 2012 YES N/A		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU NDE ON PLUG SE	TEMP. 85 F 7/2012 CC ECK VALVES INST GS SEAL WELDED CAL WELDS COMP	Witnessed by NGS-JOHN SE CTOBER 19th CALLED & INSPECTED LETE	11:25 AM BOK 2012 YES N/A N/A		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED YES	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Apected by AMES HAGEN	CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU NDE ON PLUG SE	TEMP. 85 F 7/2012 CCCK VALVES INST	Witnessed by NGS-JOHN SE CTOBER 19th CALLED & INSPECTED LETE	11:25 AM BOK 2012 YES N/A		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LID	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 SPECIAL BY AMES HAGEN LAF & HAGEN BER 19th, 2012	CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU NDE ON PLUG SE	TEMP. 85 F TEMP. 7/2012 CC CCK VALVES INST GS SEAL WELDED AL WELDS COMP ALVES CLOSED &	Witnessed by NGS-JOHN SE CTOBER 19th CALLED & INSPECTED LETE PLUGGED Witnessed by	11:25 AM BOK 2012 YES N/A N/A YES		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LID	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 AMES HAGEN LAF LAGEN LAGEN LAF LAGEN CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU NDE ON PLUG SE	TEMP. 85 F TEMP. 7/2012 CC CCK VALVES INST GS SEAL WELDED AL WELDS COMP ALVES CLOSED &	Witnessed by NGS-JOHN SE CTOBER 19th CALLED & INSPECTED LETE PLUGGED WITNESSED BY WGS-JOHN S	11:25 AM BOK- Sed. K 2012 YES N/A N/A YES			
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY. SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LD WOOD LD LD LD LD LD LD LD LD LD	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 Special by AMES HAGEN LAF S HAGEN DER 19th, 2012	CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU NDE ON PLUG SE	TEMP. 85 F TEMP. 7/2012 CC CCK VALVES INST GS SEAL WELDED AL WELDS COMP ALVES CLOSED &	Witnessed by NGS-JOHN SE CTOBER 19th CALLED & INSPECTED LETE PLUGGED Witnessed by	11:25 AM BOK- Sed. K 2012 YES N/A N/A YES		
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 20" LINE PASSED TESTING COMPANY SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY SIGNATURE LINE COMPANY SIGNATURE	DATE OF TEST 10/19/2013 D CALIBRATION DA G GAUGE #: 16531 SPECIAL BY AMES HAGEN LAF & HAGEN JER 19th, 2012	CALIBRATION: 6/ CALIBRATION: 6/ CONTROL & CHE HIGH POINT PLU NDE ON PLUG SE	TEMP. 85 F TEMP. 7/2012 CC CCK VALVES INST GS SEAL WELDED AL WELDS COMP ALVES CLOSED &	Witnessed by NGS-JOHN SE CTOBER 19th CALLED & INSPECTED LETE PLUGGED WITNESSED BY WGS-JOHN S	11:25 AM BOK- Sed. K 2012 YES N/A N/A YES		



Pressure Test Certificate

NOTED OF CARDIDOOD			STATE OF THE PARTY		5090 8000	
PROJECT N62583-09-D-0132/0003		LOCATION TAN	K 5	JOB NUMBER	54118	
CONTRACTOR WILLBROS GOVERNMENT SER	VICES	P & ID No:			-	
SERVICE NORMAL			N	I/A		
TEST PACK NUMBER, TANK 5 FINAL HYDRO CASIN	IG SAMPLE PIPING	G DRAWING No. 54118-003-07-400s				
SYSTEM NUMBER	5006		7	rC	- III CAL	
MARK No N/A		150 No.				
LINE No.	162 2501		N	I/A		
3/4" SAMPLE PIPING			N	I/A		
LINE SPECIFICATION 120 FEET		TEST MEDIUM	WATER			
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI	
STRESS RELIEVED YES NO	INTERNAL	LINING	ytis no	7 7 7 7		
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE			DATE		
MATERIAL RECORDS COMPLETE	SIGNATURE	SAVE TO SE	15- TS	DATE	14.744.500	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	. 12	1	DATE	,	
PRE-TEST INSPECTION FOREMAI	N SIGNATURE	91 201		DATE /	1/22/12	
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED A	ND PURGED OF A	NIR .	YES	
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	ITHIN SPECIFICA	TION	YES	
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPMEN	NT AND GAGES II	NSPECTED	YES	
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PROP	ERLY INSTRUCT	ED	YES	
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN I	YES			
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	AREA CLEARED O	F PERSONEL		YES	
TEST MEDIUM WITHIN SPECIFICATION	YES					
	**************************************	- 6 13.V - 13.V			-	
with the second	Arris		Company of the compan			
QUALITY CONTRO	L SIGNATURE		*	DATE		
PRESSURE TEST	DATE OF TEST		AMBIENT 85 F	START	FINISH	
PRESSURE TEST 4 HOURS	DATE OF TEST 10/22/2012		AMBIENT 85 F TEMP.		FINISH 11:11 AM	
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING	DATE OF TEST 10/22/2012 CALIBRATION DATE G GAUGE #: 16531	TE)	7/2012	START 7:11 AM Witnessed by	11:11 AM	
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING	DATE OF TEST 10/22/2012 CALIBRATION DATE G GAUGE #: 16531	TE)	7/2012	START 7:11 AM Witnessed b	11:11 AM	
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING INS. COMPANY WGS- JA	DATE OF TEST 10/22/2012 CALIBRATION DATE G GAUGE #: 16531	TE)	7/2012	START 7:11 AM Witnessed b	11:11 AM	
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME	DATE OF TEST 10/22/2012 D CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN	TE) CALIBRATION: 6/7	72012 93.1	START 7:11 AM Witnessed b WGS-JOHN SE	11:11 AM	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME OCTOBE	DATE OF TEST 10/22/2012 DICALIBRATION DATE GINE GRAUGE #: 16531 DECIMAL DECIMA	TE) CALIBRATION: 6/7	72012 93.1	START 7:11 AM Witnessed b	11:11 AM	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION	DATE OF TEST 10/22/2012 D CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN	TE) CALIBRATION: 6/7	72012 93.1	START 7:11 AM Witnessed b WGS-JOHN SE	11:11 AM	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY N/A	DATE OF TEST 10/22/2012 D CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN	TE) CALIBRATION: 6/7	/2012 //2012	Witnessed by WGS-JOHN SE	11:11 AM	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED	DATE OF TEST 10/22/2012 D CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN	TE) CALIBRATION: 6/7	72012 CK VALVES INST	Witnessed by WGS-JOHN SE	11:11 AM BOK R 6 A A R 7 6	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES	DATE OF TEST 10/22/2012 D CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN	CALIBRATION: 6/7	TEMP. 85 F 7/2012 OCK VALVES INST	Witnessed by WGS-JOHN SE START SECTOBER 22nd CALLED & INSPECTED	11:11 AM EBOK 76. 4 1, 2012 YES N/A N/A	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED A HOURS A HOURS OCTOBE	DATE OF TEST 10/22/2012 D CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN	CONTROL & CHE	CK VALVES INST	Witnessed by WGS-JOHN SE CTOBER 22nd CALLED & INSPECTED LETE	11:11 AM BOK R 6 A A R 7 6	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LOSS LO	DATE OF TEST 10/22/2012 D CALIBRATION DATE OF GAUGE #: 16531 DOCIDO BY AMES HAGEN AMES HAGEN ER 22nd, 2012	CONTROL & CHE	CK VALVES INST GS SEAL WELDED AL WELDS COMP LVES CLOSED &	Witnessed by WGS-JOHN SE START 7:11 AM Witnessed by WGS-JOHN SE START SE CTOBER 22nd ALLED A INSPECTED LETE PLUGGED Witnessed by Wit	11:11 AM BOK BOK YES N/A N/A YES	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LOSS LO	DATE OF TEST 10/22/2012 CALIBRATION DATE G GAUGE #: 16531 PROFINE HAGEN AMES HAGEN FER 22nd, 2012	CONTROL & CHE	CK VALVES INST GS SEAL WELDED AL WELDS COMP LVES CLOSED &	Witnessed by WGS-JOHN SE START 7:11 AM WGS-JOHN SE CTOBER 22nd ALLED & INSPECTED LETE PLUGGED	11:11 AM BOK BOK YES N/A N/A YES	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LDS	DATE OF TEST 10/22/2012 D CALIBRATION DATE OF GAUGE #: 16531 DOCIDO BY AMES HAGEN AMES HAGEN ER 22nd, 2012	CONTROL & CHE	CK VALVES INST GS SEAL WELDED AL WELDS COMP LVES CLOSED &	Witnessed by WGS-JOHN SE START 7:11 AM Witnessed by WGS-JOHN SE START SE CTOBER 22nd ALLED A INSPECTED LETE PLUGGED Witnessed by Wit	11:11 AM BOK BOK YES N/A N/A YES	
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 120" LINE PASSED TESTING COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY' VGS-J/ COMPANY' WGS-J/ WGS-J/	DATE OF TEST 10/22/2012 CALIBRATION DATE OF GAUGE #: 16531 PROFINE HAGEN AMES HAGEN AMES HAGEN AMES HAGEN	CONTROL & CHE HIGH POINT PLUG NDE ON PLUG SE DRAIN / VENT VA	CK VALVES INST	Witnessed by WGS-JOHN SE START 7:11 AM Witnessed by WGS-JOHN SE START SE CTOBER 22nd ALLED A INSPECTED LETE PLUGGED Witnessed by Wit	TI:11 AM TEBOK TEBOK YES N/A YES	



Pressure Test Certificate

		A Address to the Control of the Cont		A STATE OF THE STA	and the second second second		
PROJECT N625	683-09-D-0132/0003		LOCATION TAN	IK 5	JOB NUMBER	54118	
CONTRACTOR V	WILLBROS GOVERNMENT SER	VICES	P & ID No.	•		*****	
SERVICE NORM	AL			1	I/A	New York	
TEST PACK NUME	BER. TANK 5 FINAL HYDRO CASIN	IG SAMPLE PIPING	DRAWING No.	54118-0	03-07-400s	8/	
SYSTEM NUMBER	₹	*** *** **** ****		7	rc .	_	
MARK No.	N/A		ISO No.				
LINE No.					l/A	1-1.04-2-20	
	3/4" SAMPLE PIPING		<u> </u>	١	VA.	,	
LINE SPECIFICAT	TION 60 FEET		TEST MEDIUM	WATER	590 No.	2007	
DESIGN PRESSUI	re (mawp) 100	PS1	TEST PRESSURE	150		PSI	
STRESS RELIEVE	ED YES NO	INTERNAL	LINING	YES NO	1. 1. 1. 1. 1.	(1-34)	
ALL PRE-TEST NI	DE COMPLETE AND ACCEPTED	SIGNATURE			DATE	X41	
MATERIAL RECO	ORDS COMPLETE	SIGNATURE	8 13.5		DATE	Markey Marky agree	
WELDING HISTO	DRY RECORDS COMPLETE	SIGNATURE	10	1	DATE		
PRE-TEST INSPEC	CTION FOREMAI	N SIGNATURE	Ged Sell		DATE /	0/22/12	
WELDING OF PRE	ESSURE PARTS COMPLETE	N/A	SYSTEM FILLED A	AND PURGED OF A	AIR	YES	
PROPER GASKETS	S. BOLTS AND BLINDS	YES	TEMPERATURE W	ITHIN SPECIFICA	TION	YES	
TEMPORARY VEN	TS AND DRAINS INSPECTED	YES	HYDRO EQUIPMENT AND GAGES INSPECTE			YES	
TEST PLUGS INSP	ECTED AND SECURED	YES	OPERATORS PROPERLY INSTRUCTED YES				
NSTUMENTATIO	N BLOCKED OR REMOVED	YES	BARRACADES IN PLACE AREA CLEARED OF PERSONEL YES				
VALVES IN THE R	LIGHT POSITION (OPEN/CLOSED)	YES					
TEST MEDIUM WI	ITHIN SPECIFICATION	YES					
		\$.				1, 4	
	QUALITY CONTRO	L SIGNATURE			DATE		
PRESSURE TEST DURATION	4 HOURS	DATE OF TEST 10/22/2012	2	AMBIENT 85 F	START 11:40 AM	FINISH 3:40 PM	
MATERIAL SECTION OF THE SECTION OF T	O INCLUDE GAUGE NUMBER AND PIPING 60' LINE PASSED TESTING		202		.Witnessed by		
COMPANY	WGS- JA	MES HAGEN	os w 1981	\	NGS-JOHN SE	SOK	
SIGNATURE	Man	144		Jone	1 Sel		
PRINTNAME	()5	MIE HAS	-, 1	7	John 526.	ik	
DATE	ОСТОВЕ	R 22nd, 2012		0	CTOBER 22nd,	2012	
POST HYDRO RES HYDRO BLOWN D	AVA		CONTROL & CHE	CK VAI VES INST	ALIED	YES	
HYDRO BLINDS P	YES	=37 =37	HIGH POINT PLUC			N/A	
PROPER GASKET!	VEC	_	NDE ON PLUG SE			N/A	
PROPER BOLTON	VEC		DRAIN / VENT VA			YES	
2021410			JIGHT THE TH	& CLOSED &			
Passage and the company		MES HAGEN		1	Witnessed by WGS- JOHN SE	A - 100 OF 100 THE	
COMPANY		The state of the s		<u> </u>	. 55 55111 55	-X'-	
COMPANY	Λ.	1.11					
SIGNATURE	9				***		
) Ja	- 67 - FT Alac C R 22nd, 2012	u,j		CTOBER 22nd,	2012	



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003	3,000	LOCATION TAN	K 5	JOB NUMBER	54118
CONTRACTOR WILLBROS GOVERNMENT SER	VICES	P & ID No.			200.00.02280. 10
SERVICE NORMAL		2384 Carata	N	/A	7
TEST PACK NUMBER. TANK 5 FINAL HYDRO CASIN	G SAMPLE PIPING	DRAWING No.	54118-00)3-07-400s	
SYSTEM NUMBER		- XXXXII - X	7	rC)))=
MARK No. N/A	38 39 <u>2</u>	ISO No.		0.2.9409. 1.3800	5202000Te240505
LINE No.	77 10		N	I/A	300 12
3/4" SAMPLE PIPING	8	70 2	N	/A	
LINE SPECIFICATION 175 FEET		TEST MEDIUM	WATER		-
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI
STRESS RELIEVED YES NO	INTERNAL	LINING	YES NO	78072-003	NI b
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE			DATE	
MATERIAL RECORDS COMPLETE	SIGNATURE		-	DATE	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	1.17		DATE	
PRE-TEST INSPECTION FOREMAN	N SIGNATURE	and Sol	(DATE /	1/23/12
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED A	ND PURGED OF A	AIR 7	YES
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	THIN SPECIFICA	TION	YES
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPME	NT AND GAGES I	NSPECTED	YES
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PROPERLY INSTRUCTED			YES
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN PLACE AREA CLEARED OF PERSONEL YES			
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES				
TEST MEDIUM WITHIN SPECIFICATION	YES	•			
	*				
QUALITY CONTRO	L SIGNATURE			DATE	
PRESSURE TEST 4 HOURS DURATION	10/23/2012	2	AMBIENT 85 F TEMP.	START 8:35 AM	FINISH 12:35 PM
	GAUGE#: 16531	ns Aksimoninansonishisanishtisan		Witnessed by	
COMPANY WGS- JA	MES HAGEN		,	NGS-JOHN-SE	вок
SIGNATURE () AA~	114		5	20 20	2.11
PRINT NAME / The	ATE MAGE	N		3.40	Sebak
DATE	ER 23rd, 2012		0	CTOBER 23rd,	2012
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY N/A		CONTROL & CHE	CK VALVES INST	ALLED	YES
HYDRO BLINDS PULLED YES		HIGH POINT PLUC	OS SEAL WELDED	& INSPECTED	N/A
PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS YES YES		NDE ON PLUG SE	AL WELDS COMP	LETE	N/A YES
7 T. 1-4 WINDO	perted by			Witnessed by	
10 CH 100	AMES HAGEN			ygs- Jehn se	(1) 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SIGNATURE (A	1.1-		and	84	- 1000 - 110 - 1000 - 176 276 276 2
PRINT NAME / JAM	DE HOUSE	i	1	John Se	WK
	ER 23rd, 2012		0	CTOBER 23rd	100000000000000000000000000000000000000
The state of the s	CANADA AND CONTRACTOR		1		Set A Control of Contr



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003	W 25	LOCATION TANK 5		JOB NUMBER	54118
CONTRACTOR WILLBROS GOVERNMENT SER	VICES	P & ID No.	el h		763 - 383
SERVICE NORMAL			٥	l/A	
TEST PACK NUMBER. TANK 5 FINAL HYDRO EXTERN	IAL SAMPLE PIPING	DRAWING No.	54118-0	03-07-400s	
SYSTEM NUMBER		(5) (5) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	trC, 2	erC, 3rC)
MARK No. N/A		ISO No.		- 100 m	-7032
LINE No.			, i	UA .	Market Market Co.
3/4" & 1" SAMPLE PIPING			١	I/A	
LINE SPECIFICATION		TEST MEDIUM W/	ATER		1
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE 15	0	20 11 192	PSI
STRESS RELIEVED YES NO	INTERNAL	LINING YES	NO		
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE			DATE	
MATERIAL RECORDS COMPLETE	SIGNATURE			DATE	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	1 12 1	- AT- MA	DATE	
PRE-TEST INSPECTION FOREMAI	SIGNATURE	gal Sil		DATE 4	5/22/13
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED AND P	URGED OF	AIR	YES
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE WITHIN	SPECIFICA	TION	YES
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPMENT AN	ID GAGES I	NSPECTED	YES
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PROPERLY	INSTRUCT	ED	YES
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN PLAC	E		YES
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	- AREA CLEARED OF PEF	YES		
TEST MEDIUM WITHIN SPECIFICATION	YES				
Small to		• <u>9 198</u>		40 10	
QUALITY CONTRO	L SIGNATURE) si	DATE	
PRESSURE TEST 4 HOURS DURATION	DATE OF TEST 5/22/13	AMB	ENT 85 F	START 7:51 AM	ғызн 11:51 AM
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" & 1" SAMPLE PIPING PASSED TESTING GA				Witnessed by	
IL CINIPANY I A	MES HAGEN			NGS-JOHN-SE	
SIGNATURE Gray	Stor		- 4	and Jak	
PRINT NAME (TAKE	HITTEL			Jo41 3	ochr
DATE MAY 2	22ND, 2013		3	MAY 22ND, 20	013
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY N/A		CONTROL & CHECK V	AI VES INST	ALLED	YES
HYDRO BLINDS PULLED YES	-	HIGH POINT PLUGS SE			N/A
PROPER GASKETS INSTALLED YES	7	NDE ON PLUG SEAL W			N/A
PROPER BOLTING & TIGHTNESS YES	_	DRAIN / VENT VALVES		CONTRACTOR CONTRACTOR	YES
CONTRACTOR AND					
CORNER (180)	perted by AMES HAGEN			Witnesort by WG9- JOHN-SE	THE THE PARTY OF T
SIGNATURE A.	/ slam		G	1 XIS	
PRINT NAME / JANE	5 HM 2N		-	3.4	Selek
- Amin	22ND, 2013			MAY 22ND, 2	
191731 4		AT TORRA ICACA CAR			T 10 39 35 85 50



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003		LOCATION TAN	NK TK5	JOB NUMBER	54118	
CONTRACTOR WILLBROS GOVERNMENT SER	RVICES	P & ID No.	and the second party of th			
SERVICE NORMAL - ASME B31.3			1	V/A	* -	
TEST PACK NUMBER. TANK 5 CASING SAMPLE	PIPING	DRAWING No.	N	ONE		
SYSTEM NUMBER						
MARK No. N/A		ISO No.	Video	**		
LINE No.	72		- 1	VA.		
INTEGRITY TEST 3/4" SAMPLE PI	PING	0 22-135	ı	I/A		
LINE SPECIFICATION 10 FEET	1	TEST MEDIUM	WATER			
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150	0.:	PSI	
STRESS RELIEVED YES NO	INTERNA	L LINING	¥ES NO	32 57—		
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE	5 N T T S N T T S N T T S N T T S N T T S N T S		DATE		
MATERIAL RECORDS COMPLETE	SIGNATURE	80)	11.2	DATE		
WELDING HISTORY RECORDS COMPLETE	SIGNATURE		197	DATE		
PRE-TEST INSPECTION FOREMAI	N SIGNATURE			DATE	3 - 3 -	
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED	AND PURGED OF	AIR	YES	
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	/ITHIN SPECIFICA	TION	YES	
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPMENT AND GAGES INSPECTED OPERATORS PROPERLY INSTRUCTED YES				
TEST PLUGS INSPECTED AND SECURED	YES					
NSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN	YES			
/ALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	AREA CLEARED OF PERSONEL YES				
TEST MEDIUM WITHIN SPECIFICATION	YES					
					1——	
QUALITY CONTROL	L SIGNATURE	ES SAME	500	DATE		
PRESSURE TEST	DATE OF TEST	22000			Parties.	
DURATION 4 HOURS	10/07/201	0	AMBIENT 72 F	8:05 AM	4:58 PM	
DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN	CALIBRATION DA	(TE)	TEMP.	,	4:58 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN INSTERNMENTS. P.	CALIBRATION DA	(TE)	ATION:	Witnessed by	4:58 PM	
COMPANY COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN MAIN WGS- P.	CALIBRATION DANIEL OF THE PRESSURE GALOR PRESSURE G	(TE)	ATION:	Witnessed by VGS- REED CA	4:58 PM	
COMPANY COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN TING WOS- P. SIGNATURE	CALIBRATION DA	(TE)	ATION:	Witnessed by	4:58 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 34° SAMPLE PIPING 10' LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS-P SIGNATURE PRINT NAME	PETER DE LE COLLINS	(TE)	ATION:	Witnessed by NGS- REED CA	4:58 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN Insi COMPANY WGS- P. SIGNATURE PRINT NAME	CALIBRATION DANIEL OF THE PRESSURE GALOR PRESSURE G	(TE)	ATION:	Witnessed by VGS- REED CA	4:58 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS-P SIGNATURE PRINT NAME DATE TO/	PETER DE LE COLLINS	(TE) SE #: 45-1279 #1 CALIBR	ATION:	Witnessed by NGS- REED CA Pol 10/07/2010	4:58 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 34° SAMPLE PIPING 10° LINE FAILED TESTING WOULDN'T MAIN TING COMPANY WGS- P. SIGNATURE PAINT NAME DATE OST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY YES	PETER DE LE COLLINS	CONTROL & CHE	CK VALVES INST.	Witnessed by NGS- REED CA 10/07/2010	4:58 PM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 34° SAMPLE PIPING 10° LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS- P. SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED YES	PETER DE LE COLLINS	CONTROL & CHE	CK VALVES INST.	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED	4:58 PM VIN YES N/A	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS- P. SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES YES	PETER DE LE COLLINS	CONTROL & CHE	CK VALVES INST.	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED	4:58 PM VIN YES N/A N/A	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS- P. SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES YES	PETER DE LE COLLINS	CONTROL & CHE	CK VALVES INST.	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED	4:58 PM VIN YES N/A	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS- P. SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Inst	PCALIBRATION DANIEL PRESSURE GAUGE PRESSURE G	CONTROL & CHE	CK VALVES INST. GS SEAL WELDED AL WELDS COMPI	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	4:58 PM VIN 2: YES N/A N/A YES	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS- P. SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Inst	PCALIBRATION DANIES OF THE PRESSURE GALOR PRESSURE	CONTROL & CHE	CK VALVES INST. GS SEAL WELDED AL WELDS COMPI	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED LETE PLUGGED	YES N/A N/A YES	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN COMPANY WGS- P. SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Inst	PCALIBRATION DANIEL PRESSURE GAUGE PRESSURE G	CONTROL & CHE	CK VALVES INST. GS SEAL WELDED AL WELDS COMPI	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	4:58 PM VIN 2: YES N/A N/A YES	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING 10" LINE FAILED TESTING WOULDN'T MAIN TING COMPANY WGS- P. SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LINE COMPANY WGS- P. COMPANY WGS- P. COMPANY WGS- P.	PCALIBRATION DANIEL PRESSURE GAUGE PRESSURE G	CONTROL & CHE	CK VALVES INST. GS SEAL WELDED AL WELDS COMPI	Witnessed by NGS- REED CA 10/07/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	4:58 PM VIN 2: YES N/A N/A YES	



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003		LOCATION TAN	NK TK5	JOB NUMBER	54118	
CONTRACTOR WILLBROS GOVERNMENT SE	RVICES	P & ID No.				
SERVICE NORMAL - ASME B31.3	3748		٨	l/A		
TEST PACK NUMBER. TANK 5 CASING SAMPLE	PIPING	DRAWING No.	No	ONE	3. 99. 37.43	
SYSTEM NUMBER	***		38			
MARK No. N/A		ISO No.	0 000000			
LINE No.	50%	2000	١	N/A		
INTEGRITY TEST 3/4" SAMPLE P	IPING		N	VA.		
LINE SPECIFICATION 75FEET		TEST MEDIUM	WATER			
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI	
STRESS RELIEVED YES NO	INTERNA	L LINING	YES NO	gg services.	<u> </u>	
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE	100 A		DATE	-50	
MATERIAL RECORDS COMPLETE	SIGNATURE			DATE	·	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	***		DATE		
PRE-TEST INSPECTION FOREMA	N SIGNATURE			DATE	Marks Mark	
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED	AND PURGED OF A	TOTAL TOTAL CONTROL OF THE PARTY OF THE PART	YES	
ROPER GASKETS, BOLTS AND BLINDS YES		- Predestrant State (VITHIN SPECIFICA		YES	
FEMPORARY VENTS AND DRAINS INSPECTED	YES	-6	NT AND GAGES IN		YES	
TEST PLUGS INSPECTED AND SECURED	YES	and residue to the supplier of the second	PERLY INSTRUCT		YES	
NSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN			POSTAL PARTY	
ALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	BARRACADES IN PLACE AREA CLEARED OF PERSONEL YES YES				
TEST MEDIUM WITHIN SPECIFICATION	YES					
		-		22	*	
QUALITY CONTRO	L SIGNATURE			DATE	· · · · · · · · · · · · · · · · · · ·	
PRESSURE TEST 4 HOURS	DATE OF TEST 10/08/201	0	AMBIENT 71 F	START 7:58 AM	FINISH 9:15 AM	
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAIN	TAIN PRESSURE GAUG	945 33 74 3	ATION	Witnessed by	×	
COMPANY WGS	- Pat Collins			WGS - Reed Ca	vin	
SIGNATURE (P)		20072100000	4300-371	Pacin		
PRINT NAME					\$1_\$1	
2RINT.NAME 10/08/2010		10/08/2010				
DATE	/08/2010	2-967	. 2000	10/08/2010		
20112	108/2010	**************************************	Veril 2	10/08/2010		
POST HYDRO RESTORATION	/08/2010	CONTROL & CHE	CK VALVES INST		YES	
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY N/A	-		CK VALVES INST	ALLED	YES N/A	
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED YES	— —	HIGH POINT PLUC	GS SEAL WELDED	ALLED & INSPECTED	N/A	
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES	— — —	HIGH POINT PLUC NDE ON PLUG SE.		ALLED & INSPECTED LETE		
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Ins	pecied by	HIGH POINT PLUC NDE ON PLUG SE.	GS SEAL WELDED AL WELDS COMPI	ALLED & INSPECTED LETE	N/A N/A YES	
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Ins	_	HIGH POINT PLUC NDE ON PLUG SE.	GS SEAL WELDED AL WELDS COMPI ALVES CLOSED & I	ALLED & INSPECTED LETE PLUGGED	N/A N/A YES	
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Ins	pecied by	HIGH POINT PLUC NDE ON PLUG SE.	GS SEAL WELDED AL WELDS COMPI ALVES CLOSED & I	ALLED & INSPECTED LETE PLUGGED Witnessed by	N/A N/A YES	
POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS LINS COMPANY WGS	pecied by	HIGH POINT PLUC NDE ON PLUG SE.	GS SEAL WELDED AL WELDS COMPI ALVES CLOSED & I	ALLED & INSPECTED LETE PLUGGED Witnessed by	N/A N/A YES	



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003	\$0	LOCATION TAP	JK TK5	JOB NUMBER	5/118
CONTRACTOR WILLBROS GOVERNMENT SI	FRVICES	P & ID No.	11. 11.0	JOB NOWBEK	J-1110
SERVICE NORMAL - ASME B31.3	LIVIOLO	P & ID No.		N/A	*
TEST PACK NUMBER. TANK 5 CASING SAMPI	I E DIDING	DR AMPIG H		ONE	
SYSTEM NUMBER	LEFIFING	DRAWING No.	N	JIVE	
MARK No. N/A		ISO No.	752752		
LINE No.		130 No.	-	VA.	
INTEGRITY TEST 3/4" SAMPLE	PIPING			I/A	-1: × · · · ·
LINE SPECIFICATION 135 FEET		TEST MEDIUM	WATER		20
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	2-2-2	HWV C	PS1
STRESS RELIEVED YES NO	INTERNA	LLINING	YES NO		
ALL PRE- TEST NDE COMPLETE AND ACCEPTED	SIGNATURE	100		DATE	100
MATERIAL RECORDS COMPLETE	SIGNATURE	17		DATE	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	10020.00	×	DATE	
	IAN SIGNATURE			DATE	
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED	AND PURGED OF	NEWSON.	YES
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W	YES		
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPME		YES	
TEST PLUGS INSPECTED AND SECURED	YES		PERLY INSTRUCT		YES
NSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN	PLACE	7.5%	St. Common State
VALVES IN THE RIGHT POSITION (OPEN/CLOSED) YES	AREA CLEARED			YES YES
TEST MEDIUM WITHIN SPECIFICATION	YES				100
		70'			
QUALITY CONTR	OL SIGNATURE			DATE	
	ios bioliticits		No.	DATE	
PRESSURE TEST 4 HOURS	DATE OF TEST 10/08/201	0	AMBIENT 72 F	START	FINISH 12:05 AM
PRESSURE TEST	DATE OF TEST 10/08/201	20 T	AMBIENT 72 F TEMP.		FINISH 12:05 AM
PRESSURE TEST 4 HOURS	DATE OF TEST 10/08/201 ND CALIBRATION DA	ATE)	ICMF.	START	
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA	DATE OF TEST 10/08/201 ND CALIBRATION DA	ATE)	ICMF.	START 10:08 AM	
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA	DATE OF TEST 10/08/201 ND CALIBRATION DA	ATE)	ATION:	START 10:08 AM	12:05 AM
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA	DATE OF TEST 10/08/201 ND CALIBRATION DA	ATE)	ATION:	START 10:08 AM	12:05 AM
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA TOMPANY WGS	DATE OF TEST 10/08/201 ND CALIBRATION DA	ATE)	ATION:	START 10:08 AM	12:05 AM
PRESSURE TEST DURATION 4 HOURS COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA COMPANY SIGNATURE PRINT NAME	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET	ATE)	ATION:	START 10:08 AM Witnessed by WGS - Reed Ca	12:05 AM
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA COMPANY SIGNATURE PRINT NAME DATE 1	DATE OF TEST 10/08/201 ND CALIBRATION DA	ATE)	ATION:	START 10:08 AM	12:05 AM
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MA COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET	ATE) E#-45-1279 #1 CALIBR	ATION:	Witnessed by WGS - Reed Ca	12:05 AM
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE 1 POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY VES	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET	CONTROL & CHE	ATION:	Witnessed by WGS - Reed Car 10/08/2010	12:05 AM
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MANDE SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLINDS PULLED YES	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET	CONTROL & CHE	ATION:	Witnessed by WGS - Reed Car 10/08/2010	12:05 AM vin YES N/A
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET	CONTROL & CHE	ATION:	Witnessed by WGS - Reed Car 10/08/2010 ALLED & INSPECTED	12:05 AM vin YES N/A N/A
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF THE STREET OF TEST INTERPRETATION DATE OF THE STREET	CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE	12:05 AM vin YES N/A
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS I HOURS LINE STATE A HOURS N/A YES YES	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF TEST OF	CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY HYDRO BLOWN WGS YES COMPANY GOMPANY WGS	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF TEST INTERPOLITION DATE OF T	CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE PLUGGED	YES N/A N/A YES
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS I HOURS LINE DATE YES PROPER BOLTING & TIGHTNESS	DATE OF TEST 10/08/201 ND CALIBRATION DATE OF TEST OF	CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
PRESSURE TEST DURATION COMMENTS (TO INCLUDE GAUGE NUMBER AN 3/4" SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAN WGS SIGNATURE PRINT NAME DATE 1 POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY YES YES COMPANY GOMPANY COMPANY DATE OF TEST 10/08/201 ND CALIBRATION DATE OF TEST OF	CONTROL & CHE	CK VALVES INST	Witnessed by WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES	



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003	LOCATION TAI	NK TK5	JOB NUMBER	54118	
CONTRACTOR WILLBROS GOVERNMENT SER	P & ID No.			200	
SERVICE NORMAL - ASME B31.3	WAR.	N/A			
TEST PACK NUMBER. TANK 5 CASING SAMPLE	PIPING	DRAWING No.	N	ONE	500
SYSTEM NUMBER	140.00			100 Kings 10	
MARK No. N/A		ISO No.			
LINE No.	45	32 - 455	1	I/A	
INTEGRITY TEST 3/4" SAMPLE PI	PING		1	I/A	W: 788
LINE SPECIFICATION 190 FEET		TEST MEDIUM	WATER		
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI
STRESS RELIEVED YES NO	INTERNA	AL LINING	AES NO		
ALL PRE-TEST NDE COMPLETE AND ACCEPTED	SIGNATURE	10 Electron 10 Ele		DATE	
MATERIAL RECORDS COMPLETE	SIGNATURE			DATE	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE	- Large	72	DATE	
PRE-TEST INSPECTION FOREMA	N SIGNATURE	-0-30 -0-31		DATE	
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED	AND PURGED OF	AIR	YES
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE V	VITHIN SPECIFICA	TION	YES
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPME	ENT AND GAGES I	NSPECTED	YES
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PRO	PERLY INSTRUCT	ED	YES
INSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN PLACE			YES
VALVES IN THE RIGHT POSITION (OPEN/CLOSED)	YES	AREA CLEARED OF PERSONEL YES			
TEST MEDIUM WITHIN SPECIFICATION	YES				
				100000 100000	UV 2n haz
QUALITY CONTRO	L SIGNATURE			DATE	
PRESSURE TEST 4 HOURS	10/08/20	10	AMBIENT 72 F	START 1:54 PM	FINISH 4:21 PM
COMMENTS (TO INCLUDE GAUGE NUMBER AND 3/4' SAMPLE PIPING LINE FAILED TESTING WOULDN'T MAIN		80.000 d.s	PATION	_	
			T	GA	<u>Gi</u>
Ins	pected by		<u> </u>	Witnessed by WGS - Reed Ca	
COMPANY WGS			<u> </u>	Witnessed by WGS - Reed Ca	
COMPANY WGS SIGNATURE	pected by		<u> </u>		
COMPANY WGS SIGNATURE PRINT NAME.	pected by		<u> </u>		avin
COMPANY WGS SIGNATURE PRINT NAME DATE 100	prected by - Pat Collins		<u> </u>	WGS - Reed Ca	avin
COMPANY SIGNATHIRE PRINT NAME. DATE POST HYDRO RESTORATION	prected by - Pat Collins	CONTROL		WGS - Reed Ca	avin
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY VES	prected by - Pat Collins		ECK VALVES INST	WGS - Reed Ca 10/08/2010 ALLED	YES
COMPANY SIGNATTIRE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED VES	prected by - Pat Collins	HIGH POINT PLU	ECK VALVES INST	WGS - Reed Ca 10/08/2010 ALLED & INSPECTED	YES N/A
COMPANY SIGNATTIRE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES YES	prected by - Pat Collins	HIGH POINT PLU NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED	WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE	YES N/A N/A
COMPANY SIGNATTIRE PRINT NAME. DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS TIME WGS VES YES YES YES	Pat Collins /08/2010	HIGH POINT PLU NDE ON PLUG SE	ECK VALVES INST	WGS - Reed Ca 10/08/2010 ALLED & INSPECTED LETE	YES N/A
COMPANY SIGNATTIRE PRINT NAME. DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS Ins	Pat Collins /08/2010	HIGH POINT PLU NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED	10/08/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY Ins WGS Ins COMPANY WGS	Pat Collins /08/2010	HIGH POINT PLU NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED	10/08/2010 ALLED & INSPECTED LETE PLUGGED	YES N/A N/A YES
COMPANY SIGNATURE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY SIGNATURE	Pat Collins /08/2010	HIGH POINT PLU NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED	10/08/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY Ins WGS Ins COMPANY WGS	Pat Collins /08/2010	HIGH POINT PLU NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED	10/08/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES



Pressure Test Certificate

		12/26	-32.287	54	
PROJECT N62583-09-D-0132/0003		LOCATION TAN	NK TK5	JOB NUMBER	54118
CONTRACTOR WILLBROS GOVERNMENT	SERVICES	P & ID No.	050 255		
SERVICE NORMAL - ASME B31.3	-271100 12	N/A			
TEST PACK NUMBER. TANK 5 12"/16" INLET	PIPING	DRAWING No.	N	ONE	
SYSTEM NUMBER					17 Z
MARK No. N/A		ISO No.			
LINE No.	1000		N/A	780	
INTEGRITY TEST 12" / 16" INLI	ET PIPING		1	N/A	
LINE SPECIFICATION JP-8		TEST MEDIUM	WATER		
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	150		PSI
STRESS RELIEVED YES NO	INTERNA	AL LINING	YES NO		27 C - 27 C - 27 C
ALL PRE- TEST NDE COMPLETE AND ACCEPTE	D SIGNATURE			DATE	
MATERIAL RECORDS COMPLETE	SIGNATURE			DATE	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE			DATE	
PRE-TEST INSPECTION FORI	EMAN SIGNATURE		900 COOT 504	DATE	
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED	AND PURGED OF		YES
PROPER GASKETS, BOLTS AND BLINDS	YES	 8 8	VITHIN SPECIFICA		YES
TEMPORARY VENTS AND DRAINS INSPECTED	YES	HYDRO EQUIPMENT AND GAGES INSPECTED			YES
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PRO	PERLY INSTRUCT	ED	YES
NSTUMENTATION BLOCKED OR REMOVED	YES	BARRACADES IN	PLACE		YES
ALVES IN THE RIGHT POSITION (OPEN/CLOSI	ED) YES	AREA CLEARED OF PERSONEL YES			
TEST MEDIUM WITHIN SPECIFICATION	YES	_			TLO
		_			94 200000
QUALITY CON	TROL SIGNATURE		100000	DATE	
PRESSURE TEST	DATE OF TEST	J - 2	AMBIENT 74 F	START	FINISH
DURATION 4 HOURS	11/02/201	10	74 F	9:32 AM	3:17 PM
PIPING PASSED TESTING GAUGE		CONTRACTOR OF	5/10		
	E 21 5 122°C 14°41 11 V		1		
COMPANY				Witnessed by WGS - Reed Ca	
8 S 9 R S 51	GS - Pat Collins	****		A CONTRACTOR OF THE PARTY OF TH	
SIGNATURE				WGS - Reed Ca	
SIGNATURE PRINT NAME				WGS - Reed Ca	
PRINT NAME DATE	GS - Pat Collins			WGS - Reed Ca	
POST HYDRO RESTORATION	GS - Pat Collins	ONITRO: 3 C		WGS - Reed Ca	
PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY VEC	GS - Pat Collins		ECK VALVES INST	11/02/2010	YES
PRINT NAME POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED VES	GS - Pat Collins	HIGH POINT PLU	ECK VALVES INST	WGS - Reed Ca	YES N/A
PRINT NAME POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES YES	GS - Pat Collins	HIGH POINT PLUI	ECK VALVES INST GS SEAL WELDED AL WELDS COMPI	11/02/2010 ALLED & INSPECTED	YES N/A N/A
PRINT NAME POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES YES	GS - Pat Collins	HIGH POINT PLUI	ECK VALVES INST	11/02/2010 ALLED & INSPECTED	YES N/A
PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS YES YES	GS - Pat Collins 11/02/2010 Inspected by	HIGH POINT PLUI	ECK VALVES INST GS SEAL WELDED AL WELDS COMPI ALVES CLOSED &	11/02/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY W	11/02/2010	HIGH POINT PLUI	ECK VALVES INST GS SEAL WELDED AL WELDS COMPI ALVES CLOSED &	11/02/2010 ALLED & INSPECTED LETE PLUGGED	YES N/A N/A YES
PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY SIGNATURE	GS - Pat Collins 11/02/2010 Inspected by	HIGH POINT PLUI NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED AL WELDS COMPI ALVES CLOSED &	11/02/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS YES	GS - Pat Collins 11/02/2010 Inspected by	HIGH POINT PLUI NDE ON PLUG SE	ECK VALVES INST GS SEAL WELDED AL WELDS COMPI ALVES CLOSED &	11/02/2010 ALLED & INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES



Pressure Test Certificate

PROJECT N62583-09-D-0132/0003		LOCATION TAN	VK TK5	JOB NUMBER	54118
CONTRACTOR WILLBROS GOVERNMENT S	P & ID No.		JOB NUMBER	07110	
SERVICE NORMAL - ASME B31.3	ZETTIOLO	N/A			
TEST PACK NUMBER. TANK 5 20"/32" INLETF	PIPING	DRAWING No.		ONE	
SYSTEM NUMBER	11/140	DRAWING No.	N.	ONE	1-45
MARK No. N/A		ISO No.	-		- E
LINE No.	ISO No.		N/A		
INTEGRITY TEST 20°/32" INLE	 		N/A	599	
LINE SPECIFICATION JP-8		TEST MEDIUM	WATER	WA	
DESIGN PRESSURE (MAWP) 100	PSI	TEST PRESSURE	100000000		PSI
STRESS RELIEVED YES NO	INTERNA	L LINING	YES NO		
ALL PRE-TEST NDE COMPLETE AND ACCEPTED	SIGNATURE	100 Sept. 100 Se		DATE	
MATERIAL RECORDS COMPLETE	SIGNATURE		- Walt	DATE	
WELDING HISTORY RECORDS COMPLETE	SIGNATURE		99.00	DATE	
PRE-TEST INSPECTION FORE	MAN SIGNATURE	1.0		DATE	- X.
WELDING OF PRESSURE PARTS COMPLETE	N/A	SYSTEM FILLED A	AND PURGED OF		YES
PROPER GASKETS, BOLTS AND BLINDS	YES	TEMPERATURE W			YES
TEMPORARY VENTS AND DRAINS INSPECTED	YES		HYDRO EQUIPMENT AND GAGES INSPECTED		YES
TEST PLUGS INSPECTED AND SECURED	YES	OPERATORS PROPERLY INSTRUCTED		YES	
INSTUMENTATION BLOCKED OR REMOVED	YES	-a	BARRACADES IN PLACE		
VALVES IN THE RIGHT POSITION (OPEN/CLOSEI	D) YES	AREA CLEARED OF PERSONEL YES			YES
TEST MEDIUM WITHIN SPECIFICATION	YES				TES
		- 1211664 W	-		THE STATE OF THE S
QUALITY CONT	ROL SIGNATURE	PESS	***********	DATE	-
PRESSURE TEST 4 HOURS	DATE OF TEST 11/06/201	0	AMBIENT 74 F	START 8:10 AM	FINISH 6:12 PM
COMMENTS (TO INCLUDE GAUGE NUMBER A					
	Inspected by		C++	Witnessed by	
WG	Inspected by SS - Pat Collins		C++	Witnessed by WGS - Reed Ca	ıvin
COMPANY WG	Inspected by SS - Pat Collins		C++		vin
COMPANY WG SIGNATURE PRINT NAME	Inspected by SS - Pat Collins		C++	WGS - Reed Ca	vin
COMPANY WG SIGNATURE PRINT NAME	Inspected by SS - Pat Collins		C++		vin
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION	Inspected by SS - Pat Collins		C++	WGS - Reed Ca	
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY N/A	Inspected by SS - Pat Collins		(5KE	WGS - Reed Ca	YES
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED WG WG	Inspected by SS - Pat Collins		CK VALVES INST	11/06/2010	YES N/A
COMPANY SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED WG WG WG WG WG WG WG WG WG W	Inspected by SS - Pat Collins	CONTROL & CHE	CK VALVES INST	11/06/2010 ALLED & INSPECTED	YES N/A N/A
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED YES	Inspected by SS - Pat Collins	CONTROL & CHE	ECK VALVES INST	11/06/2010 ALLED & INSPECTED	YES N/A
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS YES	Inspected by SS - Pat Collins	CONTROL & CHE HIGH POINT PLUC NDE ON PLUG SE	ECK VALVES INST	11/06/2010 ALLED & INSPECTED	YES N/A N/A YES
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS YES	Inspected by SS - Pat Collins	CONTROL & CHE HIGH POINT PLUC NDE ON PLUG SE	CK VALVES INST	11/06/2010 ALLED & INSPECTED LETE PLUGGED	YES N/A N/A YES
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS COMPANY WG	Inspected by SS - Pat Collins 11/06/2010	CONTROL & CHE HIGH POINT PLUC NDE ON PLUG SE	CK VALVES INST	11/06/2010 TALLED A INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES
COMPANY WG SIGNATURE PRINT NAME DATE POST HYDRO RESTORATION HYDRO BLOWN DOWN & DRY HYDRO BLINDS PULLED PROPER GASKETS INSTALLED PROPER BOLTING & TIGHTNESS YES	Inspected by SS - Pat Collins 11/06/2010	CONTROL & CHE HIGH POINT PLUC NDE ON PLUG SE	CK VALVES INST	11/06/2010 TALLED A INSPECTED LETE PLUGGED Witnessed by	YES N/A N/A YES



Certificate of Calibration

Traceability Job No

Prepared Fo

WILLBROS GOVERNMENT SERVICES 99-2500 HALWA VALLEY ST AIEA, HI 96701

P.O. No: VERBAL CASEY/SALES

Data Reqd: Yes

Instrument Information

Inst Descrip PRESSURE CAUGE
Manufacturer ASHCROFT
Model 45-1279S5-04L-400=
Serial No 8966699

Cust ID No: 8966699

Accuracy = 0.5% F.S.

Calibration Site IN SHOP
Date Rec 25-Apr-2013
Date of Cal 25-Apr-2013
Next Cal Due: 25-Apr-2014

As Received
IN TOLERANCE

OPERATIONAL

As Left
IN TOLERANCE

Next Cal Due: 25-Apr-20 Procedure S01491 Cal Result: PASS OPERATIONAL FULL CAL NOT ADJUSTED

Remarks SEE ATTACHED DATA SHEET.

Calibration Standards Used

ID No Model No Manufacturer

F436 ST-2H HEISE

F487 HQS-2 HEISE

rer

Description CALIBRATOR

PRESSURE MODULE

Serial No

HQS-15614

Cal Date

25-Jan-2013 05-Feb-2013 Cal Due

25-Jan-2014 05-Feb-2014

Calibration Room Environment

Temperature: 70F/21.1C

Relative Humidity: 49 %

Barometric Pressure: N/A

This item meets published specifications. It has been calibrated using standards traceable to the National Institute of Standards and Technology. Alternatively, accuracies have been derived from accepted values of natural physical constants, or derived by the ratio type of self-calibration techniques. This certificate may be reproduced in full. Partial reproduction may be done only with written prior consent. All calibration activities are performed in compliance with ANSI/NCSL Z540.3-2006, ISO 10012, and MIL-STD-45662A.

FLW Service Corporation

5672 Bolsa Avenue Huntington Beach, CA 92649 (800) 576-6308 Fax (714) 622-2002 Issued On April 25, 2013 By:

Ygnado Garcia, Technician

FORM P370-15.2 Mar 2012



FLW Service Corporation

\$672 Bolsa Avenue Huntington Heach, CA 92649 Ph 714-751-7512 Fax 714-755-7332 http://www.flw.com

Job/Traces	ability #: 109320.001	DATA REPORT	ID:	8966699
Date:	04/25/13			

 Date:
 04/25/13

 Unit of Measurement:
 PSI

 Range:
 0
 to
 400

 UUT Accuracy:
 0.5
 % FS

 UUT Resolution:
 1
 PSI

STANDARD READING PS1	AS FOUND PSI	ERROR %		AS LEFT PSI	ERROR %	
0	0	0.000	Pass	0	0.000	Pass
80	81	0.250	Pass	81	0.250	Pass
160	160	0.000	Pass	160	0.000	Pass
240	239	0.250	Pass	239	0,250	Pass
320	318	0.500	Pass	318	0.500	Pass
400	400	0.000	Pass	400	0.000	Pass
					ASMITTER STATE	
					1000	- 4
Ligania.			1.4		280 341385	
					7/32/	

Remarks:			
Data Taken By:	Ymacio	America	

FORM P370-30

Page 1 of 1 (Data)

June 2006

B-115

Form RD001/ Pg 1

RD Technology of Hawaii

134 Nakolo Piace Honolulu, HI 96819 (808) 833-3499

Certificate of Calibration

Willbros	Government Serv	ices			
Willbros Gr	overnment Services				
99-2500 H	alawa Valley St.				
Aiea	HI 96701-	(808) 352-0528			
Ashcroft			0-300 PSI		
Manufac			Model		
16531			Pressure Gauge		
Company of the Compan	Serial Number		Description		
06/07/20	112		112,776		
Calibrati			Test Number		
06/07/20	013				
Recalibr	ation Due	action are set 11	Asset Number		
NAVAIR	17-20MP-06		23 °C	43 % RH	
Principles and a second	ent Accuracy I Pro	cedure	Temperature	Humidity	

RD Technology of Hawaii certifies that the above listed instrument meets or exceeds all published specifications and has been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology within the limitations of the Institutes calibration services, or have been derived from accepted values of natural physical constants, or have been by the ratio type of self-calibration techniques. Our "Calibration System Requirements" is in compliance with ANSI/NCSL Z540-1 standards.

Calibration Standards Used:

Equip#	Manufacturer	Description	Model	Serial	Date Calibrated	Date Due
10,009	DH Instruments	Pressure Control Calibrator	PPC2 AF	190	04/24/2012	04/24/2013

In Tolerance

Condition Received

In Tolerance

Condition Returned

RD Technology of Hawaii / DB

This calibration document shall not be reproduced in part or full, without written approval of the issuer.

Form RD001/ Pg.1

RD Technology of Hawaii

134 Nakolo Place Honolulu, HI 96819 (308) 833-3499

Certificate of Calibration

Willbros	Government Ser	vices			
Willbros Go	overnment Services				
99-2500 Ha	alawa Valley St.				
Aiea	HI 96701-	(808) 352-0528			
Ashcroft			0-300 PSI		
Manufac	turer	4-10-1-15-2-15-2-15-2-15-2-15-2-15-2-15-2	Model		
16567			Pressure Gauge		
Serial Number		Description			
06/21/20			112,896		
Calibrati			Test Number		
06/21/20)13				
Recalibr	ation Due	- H - T	Asset Number		
NAVAIR	17-20MP-06		25 °C	45 % RH	
G. C.	ant Accuracy Pr	ocedura	Temperature	Humidity	

RD Technology of Hawaii certifies that the above listed instrument meets or exceeds all published specifications and has been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology within the limitations of the Institutes calibration services, or have been derived from accepted values of natural physical constants, or have been by the ratio type of self-calibration techniques. Our "Calibration System Requirements" is in compliance with ANSVNCSL Z540-1 standards

Calibration Standards Used:

Fouin #	Manufacturer	Description	Model	Serial	Date Calibrated	Date Due
10,009	OH Instruments	Pressure Control Calibrator	PPC2 AF	190	04/24/2012	04/24/2013

In Tolerance

Condition Received

In Tolerance

Condition Returned

Certified By Br. D.

This calibration document shall not be reproduced in part or full, without written approval of the issuer



Caltrol, Inc. 91-110 Hanua Street Kapolei, HI 96701 Ph 808-487-7717 Fax 808-488-3343

CALIBRATION CERTIFICATE

This is to certify that the following pressure instruments were checked at various pressure points for accuracy with a Keller LEO 1 Manometer SN: 14734, traceable to the National Institute of Standards and Technology, NIST and found to be within calibration specifications.

Date: October 15, 2010

Purchase order #: CC, Ann Manners

Customer: Willbros Government Services

Sale Order #: 398716

Ashcroft 45-1279SS-04L-300 0-300# PSI Gauge

Z	2
-	1
Ç	~

Actual:	Up scale <u>reading:</u>	Down scale reading:	
50 psig	49.5 psig	49,6 psig	
100 psig	101.2 psig	101.2 psig	
150 psig	152 psig	152 psig	
200 psig	202.2 psig	202 psig	
250 psig	252.2 psig	252.4 psig	

Authorized Signature Shaun Fergueson



Caltrol, Inc. 91-110 Hanua Street Kapolei, HI 96701 Ph 808-487-7717 Fax 808-488-3343

CALIBRATION CERTIFICATE

This is to certify that the following pressure instruments were checked at various pressure points for accuracy with a Keller LEO 1 Manometer SN: 14734, traceable to the National Institute of Standards and Technology, NIST and found to be within calibration specifications.

Date: October 15, 2010

Purchase order #: CC, Ann Manners

Customer: Willbros Government Services

Sale Order #: 398716

Ashcroft 45-1279SS-04L-300 0-300# PSI Gauge #/

Actual:	Up scale <u>reading:</u>	Down scale reading:
50 psig	50.5 psig	50.6 psig
100 psig	100.7 psig	100.2 psig
150 psig	151.2 psig	150.7 psig
200 psig	201.9 psig	202 psig
250 psig	251.9 psig	252.2 psig

Shaun Fergueson



Certificate of Calibration

Traceability Job No 108644.001

Prepared For:

WILLBROS GOVERNMENT SERVICES 99-2500 HALWA VALLEY ST AIEA, HI 96701

P.O. No: 54118-641/SALES Data Reqd: Yes

Instrument Information

Inst Descrip PRESSURE GAUGE
Manufacturer ASHCROFT
Model 45-1279SS-04L-300≠

Model 45-1279SS-04L-30 Serial No 8966476 Cust ID No 8966476 Accuracy = 0.5% F.S. Date Ri Date of Next C

Calibration Site IN SHOP
Date Rec: 15-Nov-2012
Date of Cal: 15-Nov-2012

Next Cal Due 15-Nov-2013 Procedure 501491 Cal Result PASS As Received
IN TOLERANCE

OPERATIONAL

IN TOLERANCE
OPERATIONAL
FULL CAL
NOT ADJUSTED

As Left

Remarks SEE ATTACHED DATA SHEET

Calibration Standards Used

ID No Model No Manufacturer Description Serial No Cal Date Cal Due HEISE PTE-I /FM PRESSURE CALIBRATOR 9999 18-jan-2012 18-Jan-2013 F447 HQS-2 HEISE PRESSURE MODULE HQ5-29535 17-May-2012 17-May-2013

Calibration Room Environment

Temperature: 72F/22.2C

Relative Humidity: 42 %

Barometric Pressure: N/A

This item meets published specifications. It has been calibrated using standards traceable to the National Institute of Standards and Technology. Alternatively, accuracles have been derived from accepted values of natural physical constants, or derived by the ratio type of self-calibration techniques. This certificate may be reproduced in full. Partial reproduction may be done only with written prior consent. All calibration activities are performed in compliance with ANSI NCSL Z540.3-2006, ISO 10012, and MIL-STD-45662A.

FLW Service Corporation

5672 Bolsa Avenue Huntington Beach, CA 92649 (800) 576-6308 Fax: (714) 622-2002 Issued On November 15, 2012 By:

Ygracio Garcia, Technician

FORM P370-15 2 Mar 2012



FLW Service Corporation

5672 Bolsa Avenue Huntington Beach, CA 92649 Ph 714-751-7512 Fax 714-755-7332 http://www.flw.com

Job/Traceability #:	108644-001
JOW HERCEGOINS IT.	I DO TENDO

DATA REPORT

ID: 8966476

Date:I	1/15/12		
Unit of Me	asurement:	PS	1
Range:	0	to	300
UUT Accuracy:		0.5	% FS
UUT Resol	ution:	0.1	PSI

	ERROR	UUT AS LEFT PSI		ERROR	AS FOUND PS1	STANDARD READING PSI
Pass	0.000	0.0	Pass	0.000	0.0	0
Pass	0.033	60.1	Pass	0.033	60.1	60
Pass	0.000	120.0	Pass	0.000	120.0	120
Pass	0.000	180.0	Pass	0.000	180.0	180
Pass	0.000	240.0	Pass	0.000	240.0	240
Pass	0.000	300.0	Pass	0,000	300.0	300
		74527 3257 1550	20-2001	12 S		44 S SWO
				3	Section that sources are	
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	A CONTRACTOR OF THE PARTY OF TH					
		92.5		(i)	3	

Remarks:		
Data Taken By:	Amei	

FORM P370-30

Page I of I (Data)

June 2006

AMENDMENT OF SOLICIT	TATION/MODII	FICATION OF CONTRACT	1 CONTRACT ID CODE	PAGE OF PAGES 1 19
2 AMENDMENT/MODIFICATION NO	3 EFFECTIVE DATE	4 REQUISITION/PURCHASE REQ NO	5 PRO.	JECT NO (Ifapplicable)
09	15-Dec-2011	ACQR1305421		
6 ISSUED BY CODE	N62583	7 ADMINISTERED BY (Ifother than item6)	CODE	
NAVAL FACILITIES ENG NEER NG COMMAND SPECIALTY CENTER ACQUISITIONS NAVFAC CODE AQ00/NAVAL BASE VENTURA COUNTY 1100 23RD AVE BLDG 1100 PORT HUENEME CA 93043-4347		See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR	(No., Street, County,	State and Zip Code)	9A. AMENDMENT OF	F SOLICITATION NO.
WILBROS GOVERNMENT SERVICES (U.S.), LLC			9B. DATED (SEE ITE	M 11)
2087 E 71ST ST STE 101 TULSA OK 74136-5462			9B. DATED (SEE ITE.	WI II)
			X 10A. MOD. OF CONT. N62583-09-D-0132-00	RACT/ORDER NO.
			10B. DATED (SEE IT	P. S. Paris, C. S.
CODE 1KPK4	FACILITY CO	DE	X 13-Jan-2010	EWI 13)
		APPLIES TO AMENDMENTS OF SOLI		
The above numbered solicitation is amended as set fit	rth in Item 14 The hour and	date specified for receipt of Offer	is extended, is not	t extended
Offer must acknowledge receipt of this amendment p		1900 D 19	he following methods:	antigorius (100 s.) reductigaretti
(a) By completing Items 8 and 15, and returning		nt; (b) By acknowledging receipt of this amendme		ted;
or (c) By separate letter or telegram which includes :				A Common
RECEIVED AT THE PLACE DESIGNATED FOR				
REJECTION OF YOUR OFFER If by virtue of this provided each telegram or letter makes reference to the				
12. ACCOUNTING AND APPROPRIATION	DATA (If required)	7 L	S	
See Schedule	(
13. THIS I	EM APPLIES ONLY	TO MODIFICATIONS OF CONTRACT	S/ORDERS.	
IT MO	DIFIES THE CONTRA	CT/ORDER NO. AS DESCRIBED IN IT	EM 14.	
A. THIS CHANGE ORDER IS ISSUED PUR CONTRACT ORDER NO. IN ITEM 10A		authority) THE CHANGES SET FORTH	IN ITEM 14 ARE MADE I	N THE
B. THE ABOVE NUMBERED CONTRACT office, appropriation date, etc.) SET FOI	RTH IN ITEM 14, PUR	RSUANT TO THE AUTHORITY OF FA		ges in paying
X C. THIS SUPPLEMENT AL AGREEMENT FAR 43.103(a)(3)	IS ENTERED INTO P	URSUANT TO AUTHORITY OF:		
D. OTHER (Specify type of modification an	d authority)			
B. OTTER (speen) type of mountainin an	d danoin y)			
E. IMPORTANT: Contractor is not,	X is required to sig	gn this document and return 1	copies to the issuing office.	g h
14. DESCRIPTION OF AMENDMENT/MODI	FICATION (Organized	hw LICE section headings including solid	ritation/contract subject mat	ter
where feasible.)	TICATION (Organized	by our section neadings, mentaling some	narion contract subject mat	
Modification Control Number: brooksa	2153			
The purpose of this supplemental modification mandatory repairs on Tank 5 in accordance		The state of the s	nding in order to perform al	
Accontance of this modification by the Cont	actor constitutos en a	scord and caticfaction and represents	navment in full for both time	and .
Acceptance of this modification by the Cont money and for any and all costs, impact eff				
	, and for dolays are	aparona arioning out or, or inculating	,	
Except as provided herein, all terms and conditions of the	document referenced in Item	19A or 10A, as hereto fore changed, remains uncha	nged and in fill force and effect	
15A. NAME AND TITLE OF SIGNER (Type	or print)	16A. NAME AND TITLE OF CO	NTRACTING OFFICER (T	ype or print)
		MARIA R. MILLER / CONTRACTS TEL: 805-982-2515	EMAL: maria.miller@navymi	Î
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNE	A SECULAR SECU		16C. DATE SIGNED
100. CONTRICTORON ILMON	150. DATE SIGNE	574,000		150. Ditt i diditib
(Construe of access and access to access	_	(Separative of Contracting Of	troop)	22-Dec-2011
(Signature of person authorized to sign)		(Signature of Contracting Of	ncer)	2

EXCEPTION TO SF 30 APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83) Prescribed by GSA FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

The following have been added by full text:

In accordance with contract clause 52.243-4 "Changes (JUN 2007)", as negotiated between the Contractor and the Government, the Contractor is hereby to provide all labor, materials, equipment, supervision, inspection, and related work necessary to perform the following additional work as provided in the Statement of Work and as outlined in the following Contractor RFIs:

RFI #07: Refurbish isolation and skin valves, dated 20 OCT 2010	\$34,463.00
RFI #08: Install Datum Plate, dated 20 OCT 2010	\$1,550.00
RFI #22: Immediate Repairs, dated 20 OCT 2010	\$291,798.39
RFI #22: Short Term Repairs, dated 07 JAN 2011	\$353,895.46
RFI #22: Long Term Repairs, dated 07 JAN 2011	\$294,025.97
RFI #23: Preparation and Coating, dated 03 FEB 2011	\$1,021,333.22
RFI #26: Remove and Replace Sample Lines, dated 31 MAR 2011	\$51,806.72

Total Cost: \$2,048,872.76

SECTION A - SOLICITATION/CONTRACT FORM

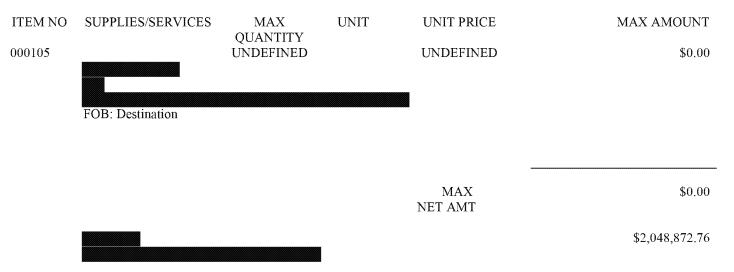
The total cost of this contract was increased by \$2,048,872.76 from \$4,608,288.92 to \$6,657,161.68.

SECTION B - SUPPLIES OR SERVICES AND PRICES

CLIN 0001

The pricing detail quantity has increased by 2,048,872.76 from 4,608,288.92 to 6,657,161.68. The total cost of this line item has increased by \$2,048,872.76 from \$4,608,288.92 to \$6,657,161.68.

SUBCLIN 000105 is added as follows:



SECTION C - DESCRIPTIONS AND SPECIFICATIONS

The following have been added by full text:

NEW TASKING

STATEMENT OF WORK ENGINEERING SERVICES POST API 653 INSPECTION REPAIR OF RED HILL TANK 5 NAVSUP FLC PEARL HARBOR PEARL HARBOR, OAHU, HAWAII

1.0 INTRODUCTION

1.1 LOCATION

The work is located at the Red Hill Underground Fuel Storage Facility, Naval Supply Fleet Logistics Center (NAVSUP FLC), Pearl Harbor, Hawaii.

1.2 DESCRIPTION OF WORK

The work includes all mandatory, short term, long term repairs recommended from the modified out of service API 653 inspection report for Red Hill Tank 5. Also included are the additional repairs listed in section 4.1.1. The major repair entails patch plate repairs and weld repairs of suspected thin spots, hollow spots, refurbish skin valves, and new coating system for lower dome. The Contractor shall provide all facilities, labor, transportation, equipment, tools, materials, incidentals, supervision and inspection necessary to perform the work.

1.3 FACILITY DESCRIPTION

The Red Hill Underground Fuel Storage Facility is located on the Island of Oahu, Hawaii. The Red Hill Underground Fuel Storage Facility consists of multiple underground storage tanks constructed in 1942-1943. The Red Hill Tanks have a coated welded steel liner backed up by concrete which bears against the solid rock from which the Tanks were carved. Each tank's nominal capacity is 302,000 barrels, and the

entire facility is capable of holding up to 252 million gallons of three different products, JP-5, JP-8 and F-76. The facility is used to store fuel in support of military operation on Oahu, in the mid-Pacific area and other area as required. The configuration of these vertical cylindrical tanks is 100 feet in diameter and 250 feet in height. The tank is domed on the lower and upper ends. Access to the Tanks is provided by an upper access tunnel 190 feet above the tank bottoms and a lower access tunnel just below the tank bottoms. Both upper and lower access tunnels are located between the two rows of ten (10) tanks. The lower tunnel extends over three miles to Pumphouse 59 at Kuahua and contains three fuel lines. And there are three entrances to the Harbor Tunnel – at the Underground Pump House (Adit 1), at Makalapa Adit 2, and the Red Hill Complex Tankage (Adit 3, Adit 4 and Adit 5).

1.4 OPERATIONS

The Red Hill Tanks are under the control of NAVSUP FLC Pearl Harbor. NAVSUP FLC Pearl Harbor personnel perform operation, patrol, and maintenance of the Red Hill Facility including the tanks. NAVSUP FLC Pearl Harbor will provide personnel and equipment needed to operate the tanks when previously notified by the Contractor. At no time shall the Contractor operate the tanks or any other government equipment, unless given prior approval from the Government fuels manager.

1.5 BACKGROUND

Tank 5 was constructed in 1942. It was converted from storage of Navy Distillate to JP-5 in 1974. Last time cleaning was performed in 2010 and inspected under modified API 653 in Nov 2010.

2.0 SCOPE

2.1 GENERAL

The Contractor shall provide the necessary qualified personnel, equipment and materials to perform all of the following work concerning repair of Tank 5.

2.2 WORK TO BE ACCOMPLISHED

Work under this Contract includes API 653 recommended (immediate, short term, and long term) and other repairs for Red Hill Tank 5. This work shall include, but not be limited to:

- a. Develop Work Plan, including detail coating plan, to perform the Work. An addendum to the current Work Plan is acceptable.
- b. Develop and Submit submittals as required by the approved Work Plan
- c. Develop Health and Safety Plan to perform the Work. An addendum to the current Health and Safety Plan is acceptable.
- d. Develop Environmental Protection Plan which shall include Hazardous Waste Disposal Plan. An Addendum to the current Environmental Protection Plan is acceptable.
- e. Perform required Work in accordance with the approved Work Plan. Detail of how to accomplish the work shall be determined by the Contractor, and the approved Work Plan shall include the sequence of work items to accomplish the work items listed on SOW.
- f. Any repair recommended in the inspection report shall be performed.
- g. Any additional repair as outlined further in section 4.0 shall be performed.
- h. Post-repair inspection shall be performed to serviceability statement.

These tasks are further specified in paragraphs 4.0 and 5.0.

3.0 GOVERNMENT FURNISHED INFORMATION (GFI) AND MATERIALS (GFM)

3.1 GOVERNMENT FURNISHED INFORMATION

a. N/A

3.2 GOVERNMENT FURNISHED MATERIAL

a. N/A

4.0 ENGINEERING SERVICES

4.1 PRE ON-SITE WORK DOCUMENTATION

4.1.1 Work Plan

- a. Prior to performing the cleaning/inspection to Tank 5, as listed in Paragraph 2.2, the Contractor shall prepare a Work Plan. The Work Plan shall include, but not limited to:
 - (1) Scope of Work & Procedures
 - (2) Detailed Work Schedule
 - (3) Subcontractors
 - (4) Responsibilities of all parties
 - (5) Required Permitting
 - (6) Applicable Unified Facilities Guide Specifications and API Standards and Recommended Practice (RP), to include, but not limited to:
 - i. 01 11 00 (01110) Summary of Work
 - ii. 01 14 00 (01140) Work Restrictions
 - iii. 01 32 16.00 20 (01320) Construction Progress Documentation
 - iv. 01 33 00 (01330) Submittal Procedures
 - v. 01 45 00.00 20 (01450) Construction Quality Control
 - vi. 01 35 29 (01525) Safety Requirements
 - vii. 02 41 00 (02220) Demolition
 - viii. 23 14 00 (15996) Commissioning of Fuel Facility Systems
 - ix. 13219N Cleaning Petroleum Storage Tanks
 - v. 09 07 13.15 Epoxy/Fluoropolyurethane Interior Coatings of Welded Steel Petroleum Fuel Tanks
 - xi. 09 97 13.27 Exterior Coating of Steel Structures
 - xii. API 650 Welded Steel Tanks for Oil Storage
 - xiii. API 653 Tank Inspection, Repair, Alteration, and Reconstruction
 - xiv. API 2015 Safe Entry and Cleaning of Petroleum Storage Tanks
 - xv. API RP 2016 Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks
 - xvi. API RP 651 Cathodic Protection of Aboveground Petroleum Storage Tanks
 - xvii. SNT-TC-1A Personnel Qualification and Certification in Nondestructive Testing
 - xviii. API MPMS Manual of Petroleum Measurement Standards Chapter 2 Tank Calibration
 - xix. NACE Recommended Practice, RP 0169 Control of External Corrosion on Underground or Submerged Metallic Piping Systems
 - xx. NACE Recommended Practice, RP0184-97 Repair of Lining Systems
 - xxi. NACE Recommended Practice, RP0193 External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms
 - xxii. NACE Recommended Practice, RP0288-94, Inspection of Linings on Steel and Concrete
 - (7) Transportation of Material and Equipment (including to location of work)
 - (8) Mobilization and Demobilization

- (9) Submittal Register
- b. The Work Plan shall incorporate all Local, State, and Federal regulations.
- c. Tank 5 has been remained empty since the last out-of-service API 653 inspection in November 2010. No cleaning is required. However, ventilation/degasing and gas free certification of Tank 5 prior to start any work inside of the tank shall be in accordance with API Standard 2015 and RP 2016 as required. The Contractor shall maintain a vapor-free condition throughout the project period, inside of the tank. Before tank repair operations begin and before workers enter the tank, the Contractors shall develop and implement written tank entry programs, including a Confined Space Program.
- d. Perform following repairs in accordance to API 650, 653, UFGS 09 97 13.15 and UFC 3-460-03.
 - i. Perform welding repairs on 138 locations identified with weld flaws.
 - ii. Perform 6" patch plate repairs on 532 locations identified with holes, gouges, or pits.
 - iii. Perform 12" patch plate repairs on 36 locations identified with corrosion or pits.
 - iv. Perform 24" patch plate repairs on 3 locations identified with corrosion or pits.
 - v. Perform 20" x 37" patch plate repair at 1 location identified with corrosion or pits.
 - vi. Minimum preparation work shall be required for welding patch plates on all locations. After requested repairs, all required NDTs shall be performed, including vacuum box test and MT. NDE personnel shall be certified in accordance with ASME B31.3
 - vii. Remove and replace all interior and exterior sample lines. New interior sample tubes shall be installed along the tank center tower. The end of those sample tubes in the lower access tunnel shall be isolated with skin valves and be of similar configuration to the updated sampling systems on other tanks. The updated sampling stations shall include the installation of a funnel return system (provided by others). The new piping shall have pipe tracing, asbuilt documentation, and permanent labeling at the sample station. The system shall be hydrotested to 1.5 MAOP. All required NDT's shall be performed after required repairs. NDE personnel shall be certified in accordance with ASME B31.3
 - viii. Install new datum plate with ½"-thick CS plate on the bottom of Tank 5. Dimension and location shall be determined at the site to accommodate the existing MTG probe and potential future automatic tank gauging system. All required NDTs shall be performed after required repairs. NDE personnel shall be certified in accordance with ASME B31.3
 - ix. Replace 6" slop line with new 4" flexible line from tank bottom to the isolation skin valve in lower access tunnel.
 - x. Clean, refurbish, and re-coat 20" Double Block and Bleed Valve. The valve shall be refurbished as required by Manufacturer standards. Once completed the valve shall be hydrotested to 1.5 times the flange class rating. Results shall be included in tank completion report and provided upon request.
 - xi. Clean, refurbish, and re-coat 12" Double Block and Bleed Valve. The valve shall be refurbished as required by Manufacturer standards. Once completed the valve shall be hydrotested to 1.5 times the flange class rating. Results shall be included in tank completion report and provided upon request.
 - xii. Clean, refurbish, and re-coat 6" Double Block and Bleed Valve. The valve shall be refurbished as required by Manufacturer standards. Once completed the valve shall be hydrotested to 1.5 times the flange class rating. Results shall be included in tank completion report and provided upon request.
 - xiii. Clean, refurbish, and re-coat 12" Ball Valve. The valve shall be refurbished as required by Manufacturer standards. Once completed the valve shall be hydrotested to 1.5 times the flange class rating. Results shall be included in tank completion report and provided upon request.
 - xiv. Remove existing coating from the lower to accommodate new coating system. The coating shall be removed and the surface to be prepared to minimum SSPC SP 10 level. Submit

- documentation that the blaster is qualified by SSPC to the SSPC C-7 Dry Abrasive Blaster Qualification Program.
- xv. Current coating samples shall be collected and tested for any hazardous content. Abrasive blasting procedure must be determined based on the test result.
- xvi. New coating system shall be applied to lower dome up to 36" above the spring/expansion joint. Coating procedure shall be in accordance to UFGS 09 97 13.15. All coating material submittal shall be submitted to the government for review and approval prior to any issuance of purchase order. Minimum qualification requirements for coating contractor include SSPC QP-1 certification and verifiable previous coating application experience in steel tank with fluoropolyurethane coating material. All relevant qualifications of coating contractor shall be submitted to the government for review and approval.
- xvii. Humidity control unit may not be required for this coating application. It is the Contractor's responsibility to prove that the interior condition of Tank 5 can remain under the manufacturer's recommended relative humidity level inside the tank.
- xviii. Level III inspector from a SSPC QP-5 certified coating Inspection Company shall be hired to perform blasting and coating application inspection. All qualifications of the company and individual inspector shall be submitted to the government for review and approval.
- xix. If conventional abrasive blasting method is employed, disposal of used abrasive blast material shall be done in accordance to all local, state and federal regulations. Disposal issue shall be addressed in waste management plan under Environmental Protection Plan.
- xx. Abrasive blasting is considered as hot work. The contractor is responsible to obtain all necessary permits prior to any abrasive blasting work. Refer section 5.2 b
- e. Center tower has been inspected by a licensed structural engineer and was repaired based on the structural engineer's assessment recommendations. Inspection report and repair report shall be available upon request.
- f. The Government will provide train assistance at their discretion to a maximum of four hours on any work day in the Lower Access Tunnel only. Train support shall only be provided during standard Government work hours of 8 am to 4 pm, Monday thru Friday. The Contractor shall notify the Government no less than one (1) day in advance of the time and location that the contractor requires the train support. All loading, unloading and securing of material onto flat beds shall be the Contractor's responsibility. Contractor retains responsibility for all items during Government transport.
- g. Any hazardous material collected shall be disposed of off-base. The Contractor is to provide a Hazardous Waste Manifest or Waste Shipment Record of all material removed from Tank 5 to on-base authority. A copy of the manifest or record shall be provided to Region Environmental on as necessary.
- h. The Work Plan's format shall be in accordance with paragraph 8.0 and submitted in accordance with paragraph 9.0 for Government Review and Approval.
- i. No work is to start on-site prior to review and approval by the Government for this Document.
- j. New strapping table will be prepared under previous clean/inspection contract.
- k. Post repair inspection shall be performed by a certified API 653 inspector. Statement for serviceability shall be submitted in two working days after post repair inspection.

4.1.2 Health and Safety Plan

a. The Contractor shall submit a Health and Safety Plan detailing such items as briefings, training, hazard control, general housekeeping, protective equipment, etc.

- b. The Health and Safety Plan shall be in accordance with EM 385-1-1, and follow the outline provided in Appendix A: Minimum Basic Outline for Accident Prevention.
- c. The Health and Safety Plan shall incorporate the Safety Plans from all subcontractors.
- d. The Heath and Safety Plan's format shall be in accordance with paragraph 8.0 and submitted in accordance with paragraph 9.0 for Government Review and Approval.
- e. No work is to start on-site prior to review and approval by the Government for this Document.

4.1.3 Environmental Protection Plan and Hazardous Waste Disposal Plan

- a. The Contractor shall submit a Environmental Protection Plan and Hazardous Waste Disposal Plan detailing such items as hazard control, storing, transporting,, disposal, spill prevention, containment, clean-up contingency measures, and etc.
- b. The Hazardous Waste Disposal Plan shall comply with applicable requirements of Federal, State, and local hazardous waste regulations.
- c. The Environmental Protection Plan and Heath and Safety Plan's format shall be in accordance with paragraph 8.0 and submitted in accordance with paragraph 9.0 for Government Review and Approval.
- d. No work is to start on-site prior to review and approval by the Government for this Document.

4.2 POST ON-SITE WORK DOCUMENTATION

4.2.1 Construction Certification Report

- a. The Contractor shall provide a written Construction Certification Report, detailing the following: inspection that was done, all applicable test records and reports, and list of all materials incorporated and records.
- b. The Construction Certification report shall include all permits and reports required, NDT results, vendor purchased equipment certification (to include serial and model number), and all relevant maintenance manuals.
- c. The Construction Certification Report shall also contain the as-built drawings indicating the locations and type of repair.
- d. This Report shall be generated while the work is being performed. The Construction Certification Report's format shall be in accordance with paragraph 8.0 and submitted in accordance with paragraph 9.0 for Government Review.

5.0 ON-SITE SERVICES

5.1 CONSTRUCTION IMPLEMENTATION

- a. The Contractor shall provide all equipment, personnel and material necessary, and perform the Work listed in paragraph 2.2, per the plans developed in paragraph 4.1.1, 4.1.2 and 4.1.3 above.
- b. Prior to Demobilizing, the Contractor shall provide a statement certifying that the tanks can be placed back into active fuel service. The Contractor shall observe the tank being put back into service. The Contractor shall stand by until the fuel level reaches full capacity of tank. When the tanks are filled to their

normal operating levels, the Contractor shall be responsible for weeps or operation of MOVs. The Contractor shall be responsible for any damage caused to the system due to debris left in the tank during inspection.

5.2 PERMITS

- a. The Contractor shall obtain all Federal, State, Local, and EPA permits required for all work that is to be done on the Tanks.
- b. The Contractor shall obtain a Hot Work Permit from Federal Fire Department for all Hot Work that is to be performed on the tanks. The FFD will require the Contractor to obtain the service of a Marine Chemist to certify the area for hot work. Contractor shall be responsible for his own fire watches. The contractor shall provide a fire watch for each hot work operation who will remain in clear view of the hot work at all time and close enough to provide emergency aid if needed. Sand blasting is considered hot work which requires a Marine Chemist to certify the areas before work is started.

NOTE: The Contractor shall identify permits required for all work that is planned on the tanks. Completed permits will have to be coordinated with FLC Pearl Harbor and/or local NAVFAC for a final determination.

5.3 SUBCONTRACTORS AND PERSONNEL

- a. The Contractor shall employ professionally and technically qualified personnel to perform the tasks and ensure the quality of services meet the standards specified. The subcontractor shall have the following qualifications but not limited to:
 - a. Successfully accomplished similar tank repair/coating work within in five years.
 - b. Submit evidence that the Contractor/subcontractor's project manager, superintendent, foreman, quality control manager, and other key personnel have previous experience in similar work in tank reconstruction.
- b. Non-destructive examination Inspector Qualifications: Submit certification that inspection and non-destructive testing personnel, including inspectors performing visual inspections, and qualified in accordance with the requirements of API 650 and ASNT SNT-TC-1A for Level II in the applicable non-destructive testing method. And AWS certified weld inspector, qualified in accordance with AWS QC 1, shall be considered qualified to perform visual inspections only, in lieu of an ASNT Level II visual inspector.
- c. Furnish a list of contact personnel of the Contractor and subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in the previous lists.
- d. The Contractor employees and representatives performing work under this contract are required to be United States citizens.
- e. Identification badges, if required, will be furnished. The Contractor shall apply for and use the identification badges as directed. The Contractor shall immediately report instances of lost or stolen badges to the Contracting Officer. Refer section 5.4 Contractor Access and Use of Premises.
- f. Change and/or substitution of subcontractor approved on the Work Plan during execution of the project shall be requested through the Contracting Officer with providing proper proof of qualification of new subcontractors.

5.4 INSTALLATION ACCESS (GENERAL) AND USE OF PREMISES

5.4.1 Contractor/Subcontractor Pass and ID Requirements

- a. Each installation maintains specific pass / identification requirements. In general, installation access requests must be submitted to the NTR at least five (15) business days prior to arrival at Installation. Installation-specific Contractor / Subcontractor Pass and ID forms / information / requirements may be requested from the NTR. Contractor shall submit information for themselves and for their subcontractors. Contractor shall also be aware that additional Installation access regulations may be in effect for non-U.S. personnel and for use of rental vehicles or privately owned vehicles (POV's).
- b. Contractor shall understand that the process to obtain passes or ID's for Contractor or subcontractor personnel is not within the purview of NAVFAC ESC and may take up to 30 days or longer depending on specific military installation requirements and/or the individual's nationality or background.

5.4.2 Base Access (JBPHH Specific)

- a. Commander, Navy Installations Command (CNIC), has established the Navy Commercial Access Control System (NCACS), a standardized process for granting unescorted access privileges to vendors, contractors, suppliers and service providers not otherwise entitled to the issuance of a Common Access Card (CAC) who seek access to and can provide justification to enter Navy installations and facilities. Visiting vendors may obtain daily passes directly from the individual Navy installations by submitting identification credentials for verification and undergoing a criminal screening/ background check. Alternatively, if the vendor so chooses, it may voluntarily elect to obtain long-term credentials through enrollment, registration, background vetting, screening, issuance of credentials, and electronic validation of credentials at its own cost through a designated independent contractor NCACS service provider. Credentials will be issued every five years and access privileges will be reviewed/renewed on an annual basis. The costs incurred to obtain Navy installation access of any kind are not reimbursable, and the price(s) paid for obtaining long-term NCACS credentials will not be approved as a direct cost of this contract. Further information regarding NCACS can be found at http://cnic.navy.mil/CNIC HQ Site/index htm (under "Popular Links").
- b. Normal process time for base access is approximately 4 weeks.
- c. The contractor and the subcontractors may also be required to submit a signed personnel and vehicle access request form to a designated NAVFAC HI FEAD contract specialist along with transmittal letter, and copy of certificate of liability insurance
- d. Any personnel request from out of the State of Hawaii shall be submitted in a separate request package, if requested by NAVFAC.
- e. A NAVFAC ESC representative may not be available at all times to sponsoring the issuance of daily badges. Contractors must submit the requests for a daily badge at least one week in advance. The Government is not responsible for any resulting delays due to the lack of sponsorship for daily badges.

5.4.3 NAVSUP FLC/Red Hill Access

- a. The contractor and the subcontractors shall submit a Contractor Verification System Form (CVS) to a designated Government Employee. The request shall include name, address, SS#, place of birth, and citizenship.
- b. The contractor and the subcontractors will be notified to provide three other supporting documents, a completed SF85, SF85P, or SF86, fingerprints, and proof of US Citizenship, to the Designated

Security Office. Once there is confirmation of no issues with the fingerprints and an OPM investigation has begun processing, a temporary NAVSUP FLC access badge will be issued.

- c. The SF85, SF85P, or SF86 will be processed by OPM with approximately 4 months of process time. A "No Determination" or "Unfavorable" result of the OPM investigation based off the SF85, SF85P, or SF86 could result in the revocation of the temporary NAVSUP FLC access badge. Revocation of such badge will further deny access to the NAVSUP FLC fuel facility.
- d. Upon issuance of the NAVSUP FLC fuels access badge, the badge must be activated via the Supply Information System Analyst at NAVSUP FLC Pearl Harbor. For Red Hill access a recent photo of each person is required. A digital photo will be acceptable.

5.4.4 Restrictions

- a. The Red Hill Underground Fuel Storage Facility is secured area for 24/7. All access gates to Red Hill are controlled by Base Security Force. The Contractor and the subcontractors shall obtain access to Red Hill through the procedure described in Section 5.4.2.
- b. Work Hours: Regular working hours shall consist of a period established by the Contracting Officer between 0700 hours and 1600 hours, Monday through Friday, excluding Government holidays. Working outside regular working hours requires Contracting Officer approval. Working extended hours will be only authorized under task driven reasons.

5.4.5 Work Outside Regular Hours

Work outside regular working hours requires Contracting Officer approval. Provide written requests ten (10) calendar days prior to such work to allow arrangements to be made by the Government for inspecting the work in progress. During periods of darkness, the different parts of the work shall be lighted in a manner approved by the Contracting Officer.

5.4.6 Utility Cutovers and Interruptions

Make utility cutovers and interruptions after normal working hours or on Saturdays, Sundays, and Government holidays. Conform to procedures required in paragraph 5.5.3.

5.5 EQUIPMENT AND MATERIAL

5.5.1 List of Equipment and Materials

- a. The contractor shall provide all equipment required to perform clean/inspection.
- b. Materials shall be of US manufacture. **NO FOREIGN** materials will be used without prior notice to and approval from the Contracting Officer.

5.5.2 Shipment of Equipment and Materials

Contractor shall notify Installation at least three (3) days in advance regarding delivery of all materials and equipment. All shipping, loading, unloading and securing of materials and equipment shall be Contractor's responsibility. The contractor may utilize the area outside of Adits 3 and 4 for equipment laydown and onsite storage. Contractor retains responsibility for all items through project completion, including the security of all materials and equipment.

5.6 OTHER CONTROLS

5.6.1 Utilities

The Contractor shall provide all utilities, including power, compressed air and potable water.

5.6.2 Temporary Sanitary Facilities

Provide adequate sanitary conveniences of a type approved for the use of persons employed on the work, properly secluded from public observation, and maintained in such a manner as required and approved by the Contracting Officer. Maintain these conveniences at all times without nuisance. Upon completion of the work, remove the conveniences from the premises, leaving the premises clean and free from nuisance. Dispose of sewage through connection to a municipal, district, or station sanitary sewage system. Where such systems are not available, use chemical toilets or comparably effective units, and periodically empty wastes into a municipal, district, or station sanitary sewage system, or remove waste to a commercial facility. Include provisions for pest control and elimination of odors.

5.6.3 Storage Areas

The contractor shall be responsible for security of his property.

5.6.4 Waste Disposal

Contractor shall be responsible for packaging, transporting, and disposing of all waste using an approved off-base waste disposal company. Contractor shall dispose of all waste as hazardous waste, unless appropriate testing shows that the waste can be disposed of as non-hazardous waste by other approved means. Hazardous waste shall be disposed according to Hazardous Waste Disposal Plan/Environmental Plan. The work site shall be kept clean of all debris and garbage.

Contractor shall manifest all waste and shall coordinate with the Installation's environmental department, as required, to ensure that all waste is properly accounted for and disposed of.

5.6.5 Interruption of Vehicular Traffic

If during the performance of work, it becomes necessary to modify vehicular traffic patterns at any locations, notify the Contracting Officer at least15 calendar days prior to the proposed modification date, and provide a Traffic Control Plan detailing the proposed controls to traffic movement for approval. The plan shall be in accordance with State and local. Make all notifications and obtain any permits required for modification to traffic movements outside Station's jurisdiction. Provide cones, signs, barricades, lights, or other traffic control devices and personnel required to control traffic. Do not use foil-backed material for temporary pavement marking because of its potential to conduct electricity during accidents involving downed power lines.

6.0 MEETINGS

6.1 GENERAL

- a. The Contractor shall schedule and conduct the following meetings for the purpose of transferring information between the Contractor and Government personnel. These meetings will be at an agreed upon time (TBD) between the Government and the Contractor. The Contractor shall submit minutes of these meetings in accordance with paragraph 9.0.
- b. The Contractor shall submit the following information for all personnel, one week prior to arriving onsite: Full Name with middle initial, SSN, Date of Birth, Driver's License Number and State of Issuance, Company name, address, phone number, date of arrival, and date of departure. Anyone arriving at FLC

Pearl Harbor without submitting this information and who cannot produce a valid picture ID will not be allowed onto the facility.

6.2 SITE VISIT/WORK PLAN/QC PLAN MEETING

The Contractor shall conduct a site visit during the development of the Work Plan to obtain information required to complete the Work Plan. The QC Plan Meeting shall be included during this meeting. This site visit will be at FISC Pearl Harbor, HI.

6.3 PRECONSTRUCTION CONFERENCE AND QC COORDINATION AND MUTUAL UNDERSTANDING MEETING

TWO weeks prior to work commencement, a meeting with the Contracting Officer, FLC Pearl Harbor Fuel Manager and pertinent Government representatives will be held to discuss and develop a mutual understanding of administration of value engineering and safety programs, drawings, execution of the work, and schedules. In addition, the QC Manager will meet with the Government to present the QC program required by this Contract. Major subcontractors shall also attend. Location of this meeting will be at FLC Pearl Harbor, HI.

6.4 PROGRESS/QC MEETINGS

The QC Manager shall meet with the NTR and the FLC Pearl Harbor Fuel Manager on a regular (weekly) basis to discuss the progress and any other requirements during the on-site implementation phase of this Contract. The contractor shall also meet with the NTR and Fuel Manager at the conclusion of the work for the final QA walk-thru.

7.0 GOVERNMENT POINTS OF CONTACT

7.1 TITLES

Government technical points of contact include a Contracting Officer's Representative (COR) and a Naval Technical Representative (NTR) appointed by the Contracting Officer (KO).

7.2 CONTRACTING OFFICER

The Contracting Officer for this contract is Ms. Maria Miller.

SPECIALTY CENTER ACQUISITIONS NAVFAC CODE AQ01/NAVAL BASE VENTURA COUNTY 1100 23RD AVE., BLDG. 1100 PORT HUENEME, CA 93043-4301 PHONE: (805) 982-2515, FAX: (805) 982-3015

7.3 CONTRACT SPECIALIST

The Contract Specialist for this contract is Andrea Brooks. Contractual Correspondence shall be sent to:

SPECIALTY CENTER ACQUISITIONS NAVFAC CODE AQ01/NAVAL BASE VENTURA COUNTY 1100 23RD AVE., BLDG. 1100

PORT HUENEME, CA 93043-4301

PHONE: (805) 982-2515, FAX: (805) 982-5234

7.4 CONTRACTING OFFICER'S REPRESENTATIVE

The COR for this contract is , NAVFAC ESC, PW54. The COR is responsible to the Contracting Officer for all matters requiring technical interface with the Contractor. All technical correspondence shall be addressed to:

NAVAL FACILITIES ENGINEERING SERVICE CENTER 1100 23RD AVE., BLDG. 1100 PORT HUENEME, CA 93043-4370 , PW54

PHONE: (805) 982-1436, FAX: (805) 982-5388

7.5 NTR

The NTR for this contract is ______, NAVFAC ESC, PW54. The NTR is the Naval Technical Representative and shall represent matters regarding technical interface with the Contractor on the jobsite.

NAVAL FACILITIES ENGINEERING SERVICE CENTER

1100 23RD AVENUE

PORT HUENEME, CA 93043-4370

, PW54

PHONE: (805) 982-4992, FAX: (805) 982-5388

8.0 REPORT FORMAT

8.1 CONTENTS

Reports shall provide a comprehensive description of work performed. Drawings, charts, illustrations, and other material needed to clarify the design shall be included. Calculations and computer output, if applicable, shall be included as appendices to the report.

Repair Certification Reports

This report will include thorough documentation all work performed. Hard copies of each tank shall be bind in plastic ring binding with a plastic sleeve inside to hold electronic copy of each report. NAVFAC ESC will provide the cover and report number.

Repair Reports Shall Include:

- 1.1.1.1 Executive Summary
- 1.1.1.2 Suitability for Service Statement
- 1.1.1.3 Work Performed
- 1.1.1.4 Timeline

Appendices:

- 1.1.1.5 Documenting Photographs 1.1.1.6 Personnel Certifications
- 1.1.1.7 NDT Documentation

1.1.1.8	QC Documentation
1.1.1.9	Materials and Coating Data
1.1.1.10	As-built Drawings
1.1.1.11	API 653 follow up inspection

8.2 QUALITY

Reports describing the work shall be clearly written, adequately detailed, well edited with no errors, and acceptable for release as a quality document. Draft reports shall be finished products requiring only technical changes after Government review.

8.3 COVER SHEET

The title/cover sheet shall be provided by the contractor. The cover and back of each final report shall be on white cover stock. All reports shall have clear plastic covers both front and back. The reports shall be spiral bound with black spines, or in 3-hole binders.

8.4 CD-ROM FORMAT

All reports are to be submitted on a CD-ROM, in addition to hard copies, in accordance with Paragraph 9.0. All documents on the CD-ROM are to be in an editable type format (i.e.: .doc, .xls, .dwg, etc.). Only scanned documents such as mill certs, x-ray reports, etc. are to be submitted as a .pdf file.

8.5 PROJECT NUMBERS

All reports and CD-ROMs are to include the DESC project numbers on the title sheet.

9.0 SUBMITTAL SCHEDULE AND DISTRIBUTION

All reports, documents, and drawings shall be delivered according to the list provided in Attachment #1.

10.0 PERIOD OF PERFORMANCE

The Period of Performance for this Contract is 20 weeks.

ATTACHMENT #1

SUBMITTAL LIST, SCHEDULE, AND DISTRIBUTION

SUBMITTAL LIST, SCHEDULE, AND DISTRIBUTION

SUBMITTAL	SUBMITTAL SCHEDULE			DISTRIBUTION - NUMBER OF COPIES		
	DRAFT (WACA)	GOVT Review	FINAL (WAGR)	Fuels	NFESC 2	DESC
WORK PLAN	4	2				
DRAFT			2		EC	
FINAL					1/EC	
HEALTH AND SAFETY PLAN						
DRAFT	4	2	337		EC	
FINAL			1		1/EC	
ENVIORNMENTAL PROTECTION PLAN/HAZARDOUS WASTE DISPOSAL PLAN						
DRAFT	4	2			EC	
FINAL			1		1/EC	
CONSTRUCTION SUBMITTALS						
FINAL					4/ 4 CDs	
QUALITY CONTROL DAILY REPORTS		18	-	EC	EC	
MEETING MINUTES ©, ©		_	-		EC	

NOTES:

WACA - Weeks after Contract Award

GOVT Review - Number of weeks for Government review after receipt of submittal.

WAGR - Weeks after Government Review

- 1 Include 1 CD-ROM with each FINAL report
- 2 Include 2 CD-ROMs with each report
- Daily reports shall be e-mailed daily, by 0900 HAST, the following day.
- 4 Minutes of meetings may be e-mailed. Minutes shall be submitted no later than three (3) working days following each meeting.

DISTRIBUTION LIST MAILING ADDRESSES:

NAVAL FACILITIES ENGINEERING SERVICE CENTER 1100 23RD AVENUE

. PW54

PORT HUENEME, CA 93043-4370

PHONE: (805) 982-4992, FAX: (805) 982-5388

SECTION E - INSPECTION AND ACCEPTANCE

The following Acceptance/Inspection Schedule was added for SUBCLIN 000105:

INSPECT AT INSPECT BY ACCEPT AT ACCEPT BY N/A N/A Government

SECTION F - DELIVERIES OR PERFORMANCE

The following Delivery Schedule item for CLIN 0001 has been changed from:

DELIVERY DATE QUANTITY SHIP TO ADDRESS UIC 29-JUN-2012 4,608,288.92 N/A

FOB: Destination

To:

DELIVERY DATE QUANTITY SHIP TO ADDRESS UIC

29-JUN-2012 6,657,161.68 N/A

FOB: Destination

The following Delivery Schedule item has been added to SUBCLIN 000105:

DELIVERY DATE QUANTITY SHIP TO ADDRESS UIC

29-JUN-2012 N/A

FOB: Destination

SECTION G - CONTRACT ADMINISTRATION DATA

Accounting and Appropriation

Summary for the Payment Office

As a result of this modification, the total funded amount for this document was increased by \$2,048,872.76 from \$4,608,288.92 to \$6,657,161.68.

SUBCLIN 000105:

Funding on SUBCLIN 000105 is initiated as follows:

Increase: \$2,048,872.76

Total: \$2,048,872.76

Cost Code:

The following have been added by full text:

(End of Summary of Changes)

VISUAL INSPECTION & TESTING (VT) LEVEL II CERTIFICATION

THIS IS TO CERTIFY THAT:

Justin Kotry

HAS BUCCESSFULLY COMPLETED

Visual Inspection & Testing (VT) Level II Technician / Competent Person

THE CANDIDATE HAS SUCCESSFULLY COMPLETED ALL OF THE REQUIREMENTS FOR API650/653 & ASNT SNT-TC-1A TRAINING.

Corporate ASNT LVL III Willbros Government Services, LLC 2/29/2012 Date

PENETRANT TESTING (PT) LEVEL II CERTIFICATION

THIS IS TO CERTIFY THAT:

Justin Kotry

HAS SUCCESSFULLY COMPLETED

Liquid Color Contrast Dye Penetrant Testing (PT) Level II Technician / Competent Person

THE CANDIDATE HAS SUCCESSFULLY COMPLETED ALL OF THE REQUIREMENTS FOR APLISSO/653 & ASNT SNT-TC-1A TRAINING.

Corporate ASNY LVL III Willbres Government Services, LLC 2/29/2012

Date

VISUAL INSPECTION & TESTING (VT) LEVEL II CERTIFICATION

THIS IS TO CERTIFY THAT:

Donald Clark

HAS SUCCESSFULLY COMPLETED

Visual Inspection & Testing
(VT) Level II Technician / Competent Person

THE CANDIDATE HAS SUCCESSFULLY COMPLETED ALL OF THE REQUIREMENTS FOR APIGSO/653 & ASNT SNT-TC-1A TRAINING.

WILLEROS

Corporate ASNT Lyl III Willbros Government Services, LLC 9/30/2011 Date