Form 3160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

FORM APE	POPRECEIVED
	ember 30, 2000
Lease Serial No	APR 2 9 2010
NMLC	69140A
lf Indian, Allotee or	NMOCD ARTESIA
	Expires No Lease Serial No NMLCO

			ll or to re-enter a r such proposals			6. If Indian, Allote	ee or Trib	MOCD ARTESI
				•		7 If Unit or CA/A	greement	Name and/or No.
SUBMIT IN T	RIPLICATE - Other	rinstruction	s on reverse side			BIG	G EDDY	UNIT #156
1 Type of Well						8. Well Name an	d No	
Oil Well Gas Well 🗶			G EDDY	UNIT (Water Well)				
2. Name of Operator		9 API Well No.	300	40				
BOPCO, L.P.		2h Phono No	o. (include area code)			10 Field and Po		
3a. Address							•	-
P.O. Box 2760 Midland, Texas 79			(432) 683-2277				lian Flats,	
4. Location of Well (Footage, Sec., T, R, M, or St UL D, SECTION 11, T22S, 966' FNL, 887' FWL						11. County or Pa	dy Coun	
12. CHECK APPROF	PRIATE BOX(ES) TO INDIC	CATE NATURE ()F N	OTICE, RE	PORT, OR O	THER D	ATA
TYPE OF SUBMISSION					ACTION			
Notice of Itent	☐ Acidize		Deepen		Production (Start/ Resume)		Water Shut-Off
	☐ Alter Casing		Fracture Treat		Reclamation			Well Integrity
☐ Subsequent Report	Casing Repai	_	New Construction		Recomplete		\mathbf{x}	Other
	Change Plans		Plug and Abandon		Temporarily			Drill Water Well to be
Final Abandonmment	Convert to Inj	ection [Plug Back		Water Dispos	sal		used as Cathodic
13 Discribe Proposed or Completed Oper	ration (clearly state all	pertinent deta	uls, including estimated	1 start	ing date of any	proposed work and	d approxim	Protection nate duration thereof
testing has been completed. Final Ab determined that the site is ready for fin BOPCO, L.P. respectf located at the Big Edo The proposed well will T22S, T28E, 966' FNI 8" Sch. 40 PVC casin open from 20' to TD. on 10' centers run in tand run to surface. Ohole to surround the afrom the top of the coanode section and 1" pad will be poured are site security diagrams location of the water visite.	fully requests dy Unit # 156 If be located L, 887' FWL g will be set There will be the hole. The calacined per anodes from ke column to sch. 40 PVC bund the cas along with a	s to drill on the s The pr from 0' e (20) ca e anode troleum the bott o the sur C pipe ru	a water well ion 11, T225 outh side of oposed water to 20' and ceast iron Anotes will be concoke breeze om of the hoface. Loreson to the surfle site has be	and S, R the er will ec 2 will le to co 1	d install of 28E, NW compresed will be ented and 2684 Hig ted by d be pum to 250'. A " Allvent to vent of	one deep want // NW, 660' ssor station of the rest of the rest of the rest of the silicon A sel insulated of the rest of the r	vell and FNL, n, UL a dep of the handes ed #8 he both plug run the gases ared a	ode bed 860' FWL. D, Section 11, th of +/- 340'. hole will be s (2.7" x 84") Halar wire tom of the would be set rough the s. A concrete and a map,
14. I hereby certify that the foregoing is true and co Name (Printed/Typed)	orrect		Title					
Bill Franks					Pipeline Fo	oreman		
Signature Sill 1	1.		Date		3/4/2010			
- Dur gran	THIS SPACE	FOR FEE	ERAL OR STAT	ΕO				
Approved by			Title	FIT NO POS	and the second product	Da	te	
/s/ Doi	n Peterson							APR 2 3 21114
Conditions of approval, if any, are attached. Approvacertify that the applicant holds legal or equitable title			Office					

which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(instructions on revers

· (1)

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 15, 2009

Submit one copy to appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code Pool Name

API Number	Pool Code	Pool Name				
Property Code	Prop	erty Name	Well Number			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	T (WATER WELL)	156			
OGRID No.	-	ator Name CO, L.P.	Elevation 3152'			
	Surfa	ce Location				
or lot No Section Townshi	Range Lot Idn Reet fre	m the North South line Feet from	the East/West line Cou			

ſ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
۱	D	11	22 S	28 E		966	NORTH	887	WEST	EDDY

Bottom Hole Location If Different From Surface

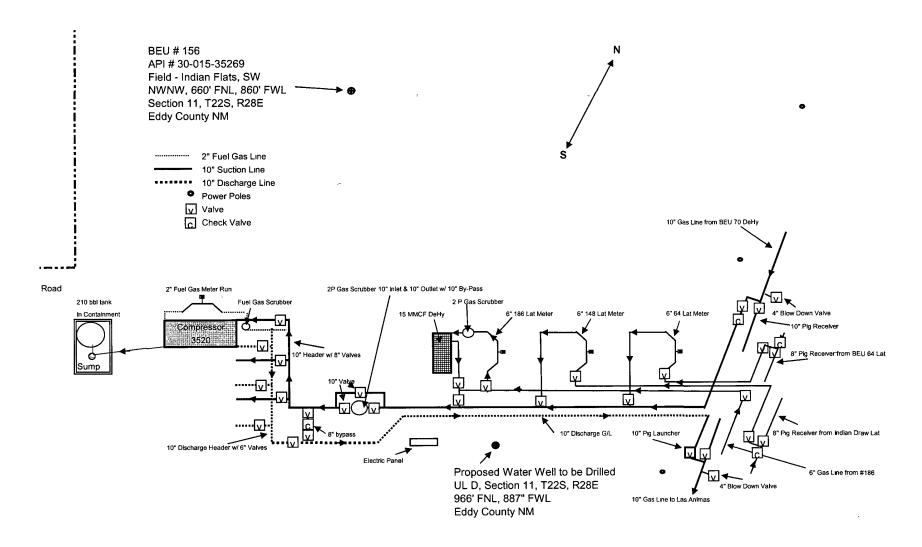
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Ore	der No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION Lot - N 32'24'43.63' Long - W 104'03'49.88' NMSPCE - N 37'82.937 (NAD-83) (NAD-83) SURFACE LOCATION Lot - N 32'24'43.63' Long - W 104'03'49.88' NMSPCE - N 37'82.937 (NAD-83) (NAD-83) SURVEYOR CERTIFICATION I hereby certify that the information consistend herein is true and complete to that the organization either sum as working interest or unleased mineral interest in the lend tockledge the proposed bottom hale of this location pursuant to a contract with an owner of such a mineral or working interest, computation, positing order hereiglors entered by the division. Signature SURVEYOR CERTIFICATION I hereby certify that the wall location shown on this plat was plotted from field notes of actual serveys made by me or under my supervision, and that the same is frue and correct to the best of my belief. Signature WEY Signature Surveyor MEX. Signature Signature MEX. Signature MEX.	 OR A NON-STANI	DARD UNIT I	HAS BEEN	APPROVED	BY THI	E DIVISION
on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief. Date surveyed MEX Signature feel of Co Professional Surveyor	Lat - N 32'24'43.63" Long - W 104'03'49.88" NMSPCE- N 513762.937 E 624498.000		· — — + -			I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organisation either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature Printed Name
		,	+ -			on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief. Date Surveyed MEA Signature Seal of Processional Surveyor

Boss, etu	Yetes Nin Bussey The Nin Nin Harry Nation Nin 12 016	The star	in the article (1)	oB7044 HBP 050 204	etal Charles Proposa 50:1 - 10:10 Proposa 50:10	R chardson Oil Riel
Sett OCCOCT Vales, Vz S/R Rolph Nix, S/R	JIAGYS Yets Pet	u s	" Jig Eddy" V.S.	Į.	To ge of the second of the se	9303 "BV
Ralph His S/Al Buss Ent	(Richardson Oil, et al)	Richardson Oil etal	Bass Ent (Aprile)	Bass Ent \$74	30 5* 11	V.S IRichard R
/ ossics	O406 Skevers (Falph Nix Fed Boss Ent	Rolph N. 4. etal S/R	aciti, Atha	64 Mil	SR Bass SR Bass Thru Line Inc., et al 265281 10627 1 HBP 062573 10857 1 HBP	Son Oil
99 (AM Boss 1 Ang Erby II Morr Disc 29 9 Mil	28	Reads Stevens	8 ass Ent. #30 6 No. Indian Flats" 26 26	A5	3457 27 НВР	
BASS	1	WAL	20 / 2 / J52	T/A To Thru Line Inc., (198) 1 OCA284 HBP		Richardson
54	Read E, Stevens	SMOUNDLAND YOURS Pet		k !	97 PR Boss Big Eddy Lin. 72 4725 7043 \$047 27 78	HBP 069144
ig Eddy" US ichardson Oil, etal)	"Big Eddy" v \$	6.5	٤ 5	Big Fddy"		US
Oil48 Boss Ent. U.S. Brig Early	(Richardson Oil, Etal) 3a55 Ent 2: 35 Oil48 Anni	5 R Bass Thru Line, Etal 6 · 6(13) 965707	PR Bass PR Bass Aing Eddy Ur 59 067144 TG 3190 00 00 00 00 00 00 00 00 00 00 00 00 0	Shell Soss Ent	S.R. Boss Richardson Oil Thru Line line, et al., 480	42 P.R.E
AR BOSE 149	Bess Eqi (Myco Ind) - Throckmorton St Can	MENAN FI	(Big Eddy Ut)	8 9 Eddy £ 5232 VI + 059 DA9 *4 58	5437 7	P.R. Buss Y HBI Big Eddy UT. E \$2: 10 13075 DA 3 4-75
32	33	3 Boss - 34	The Right day UT	•	31	Teledyne Ind.32
Yates III 1, 2 (re loh Nix 7; 3/8 ich E. Bass O/R BP B 1000s	Nix E. (Thruling Inc. etal) Curtis Aich Bass 0100G1	Thru intellected R charge not the Rep orosel Brown	947 ₩ BassEnt Simil Big Eddy Simil P.R. Boss)	36 Same ent. (2) 17/2 - 25/132 (2) 17/2 - 25/132	Baco 14	8-11557
P R. Boss HBP g-5237	1 S.R. Bass 6 4 "Big Eddy"	us.	Oisc 3 763605 947 8 BastEnt 10 Ric Bast) 10 Bast 10 Ba	"Big Eddy" 5°4°1	ສາລະສັ _{ສາ ເ} ດ ຕາມາ ຄາ : ' ປະ	19 10 30 705
3(3311 2(3)76 / R.Bosselal I	Nick (Through the etal) Arch Bass 0100G1 10 3071 10 10 16 5000 10 10 16 5000 10 10 10 10 10 10 10 10 10 10 10 10 10 1		27 040.26, - \$40.25 2140.24 1	4 23 818 3 "14056" 614665 SR Boss,	. i 16.1. d	11 1 10 1 1 11 11 11 11 11 11 11 11 11 1
P 060613	9 25 360823 HBP 460613	1 2 (012)	(Gulf) Pearl St.	Thru Line, inctal 059140 gt #HBP t	Richardsen Oil 5-1-61(3) 03302 21-96-2	Richardsor 9-1-61(2 03302
	1,7 1 0 Fed 70 2802	Bass Ent. (RichardsonOil) 43Bass Ent Bass-Fed Osco853 I.E.ASE RC	OUNDARY (en syr, Disc.)		7	_
Richardson Oil	PR Bass,etal	3 LEASE BO	DUNDARY (\$22) (*) Disc.)	امر ایام	1 Hudson E. Hudson, etal	Pure Eddu-Fed Hudson I
1 16"A53	: 6:67 060953 HBP	(P.R. Boss)	ye bab	خو. نهر ه	OESOZE	106170 HBI
t 5	<u>.</u> \$	"Bass-Fed." U.S.	Ford-St."	U., \$		u.s.
.R. Bass, .ine,Inc.,etal		Myco Ind. S.R Bass (Richardsonini Fta) Firu Line, Inc., etal (0) 0 0 3 1 4 0 HBP BIS Easy UP	S.R. Bass Thru Line, Inc., etal	Richardson Oil 8 · 1 61(2)	Richardson Oil) Hudson E. Hudson, etal	1
HBP			065140	4 069142 A	Bassent 71	06587
8	9	Struisc) / L'u'oos2	PROPOSED BEU) #156 	ABIGGADY T	8
de togres	# 069140	R Bass 10444 3	S.R Bass, Thru Line, Inc., etal 369 4: 439		111700 00	MIDLAND E
	1	0005-760.	V DPAWE		Big Eddy"	1
Bass bera/2		U. 5 1C. ornes (2) MW Per. ornes (2) MW Per. ornes (3) 7 24-81	BIG EDDY UNIT #82	U. 3. Richardson Oil 2. 8 · 1 · 61(2)	19 37 / Richardson Oil Hudson Ex	Hudson E Hudson
berg/2 G1 (2) /19c	J. Dewey, etal Chi Eñer Chi E	misland) 7 24-61 S.R. Bass, HSS Ent. N/E Thru Line Inc., etc.	069.59 HBP	069142	9 1 61 (62) Hudson, et al 03303 HBU 8 Ds 7 069876	нви о€9876
See Devon	- 1-* la	Chief Oublin		. 13 :		R;
See Devon (Santafe)	Nadel E Dinerg-St.	Ramsland Nodel E.	BIG EDDY UN	_{iz} + "I3 _{ii} + <u>.</u> IT BOUNDARY	188 % 188 % 188 €	17
EAKE R.)	Com. 4 "Dinera . St."	Delto Drig Emplorid		if it if i	· 10/3 6号1	1
		O Chief! As	<i>U 5</i>	<i>U.5.</i>	193	V.S.
Dominion, etal 86547 (Mewbourne)		Inion) Nadel C. S.	Rich- lardson Naydeen Lackey Line Oil 7-1-61(2) etal 9-1-61 069157	Richardson Oil 7 · I · SI(2) 069157	Richardson Qil 	Richardson 6 i Gi 865.035
inere to rest	Nodel to 306 to	C Bornes Trucking Thru Inc. 100 100 100 100 100 100 100 100 100 10	42 1069159 1	ं ही में ।	1 39 55 tl	
Sundown En (Qinero) (No.	=21 5 1	adel & Gusaman	- 1 23	nt n24 nt s	ار به دو	20
**************************************	THUNION) Street	MACH.		13 [†] 14 [†] 15 [†] 16	"BIG E	DDY
embourne Alexander 20 Feb.	"Big Chief Fea" 'Bi Delta Drig	g Chief * \$2.5Mil Hugh Delta Drig McMi and	Marshall Ewiston U.S.	. U.S		
Neff Dr.6	et (Rendova Oil) Comme Unic	004/10 C 6: Injunt	(H.E. Yates, etal)	(Richardson Oil)	U.S 39 15 / Richardsen Oil Richardsen	Righardsgn Oil
Herroun HB	3C 26684 19842 HBI	Bornes,	67979 - Markob Irish Whiskey	155	9 1 - \$1(2) OII 971 937 \$1 81 30.85 21 065 935	065075
A Se Corisbon Se Fee	Gourieu Fed Puel	المما	Fortion 124		'	P.R.E
S. Harrour, Tr., M.I.	13 Honel Oil Etal 19913 Fet 19913 HE Sharp of 19913 HA East tond	JC 73801 (Softer) (771) 27 (1979) (9		7 PR Book 45 A PR Book 10 PR Book	5e.ss 3 ^t 30 l	29
Eggioual & Millian	1955	Squaw A-ang Disc	Northern Marked Programmer Control Marked Programmer Marked Progra	TO \$200 TO 1000	Seas al	Ţē.
A A	O.S. Harroun Tr. M.I. HBC (3/2) Fed 0. 100 Wiley Le Co. U.3.	ling M.E Certer Pordue Forms PIBHO	D. 700 1 - PA	U. _i s	us !	اعار
100 a	Coguing Coguing Oll Napp No.	Devon Ener /2 HBC (Mg	S Ray Westall (Exxon) 6 7 67360 500 F144	(Collins 6, Ware, 43) Louis Dreyfus 9 15	Louis Dreyfus Richardson Oil Nat Gas (C - Ci(2)	P.R. Bas HBP E-5232
7	1007 Cam	19842 I (Ma	•	Nai.005 N-3479	61349 37.6 T	1773
12 1		Loving-Fed. 1 CAF	HRII "A	36 P26	BEPCO	I.P
Nodel E Gussmort un	naers Gueeman's Hadel F	MGImneri		3 C 15 Å		

Big Eddy Unit 156 Location Compressor and DeHy



PROPOSED WELLBORE DIAGRAM

Lease: Big Eddy Unit # 156 Well No.: (CP) Water Well Field: Indian Flats, SW Location: UL D, Section 11, T22S, R28E, 966' FNL, 887' FWL API: NA County: Eddy St: NM #8 Halar wire - 1" Sch. 40 PVC Vent Pipe Surface Csg. Size: Wt/Grd Sch. 40 PVC 20' 8" Sch 40 PVC Set @: 20' 20 Sxs cmt: Circ: Yes Bentonite Plug TOC: Surface `1" Sch 40 PVC Vent Pipe Hole Size: 8-1/2" **Above Anodes** Production Csg. Size: Open Hole Wt/Grd No 340' +/-Set @: Sxs Cmt: 0 Circ: No TOC: No 8" Hole Size: Anodes surrounded by Coke 1" Allvent Pipe PVC vented thru the anode zone 20 Anotec 2684 High Sillicon

340'

PBTD: 340' TD: 340' Updated: 3/1/2010 WHF Author:

Anodes 2.7" x 84" on 10' centers

With #8 Halar leadwires

Top of Water 280' From logs

BEU # 156 gas well

0

Darrell Crass Drilling Company, Inc.

P. O. Box 60031 · Midland, Texas 79711-0031 (432) 561-8703 Office · (432) 561-5258 Fax

December 30, 2009

BOPCO Attn: Guy Gage 201 Main Street Fort Worth, Texas 76102

Dear Mr. Gage:

Darrell Crass Drilling is pleased to offer our proposal to install one cathodic protection system for BOPCO's Big Eddy Gathering system located approximately six miles east of Carlsbad, New Mexico.

Based on information provided and current requirement calculations it is estimated that 48.53 amperes of current will be required to mitigate external corrosion of the system. Actual current requirements may vary dependent on soil conditions, pipeline coating and other variables.

We propose to install one deep anode bed located at BEU 156 and providing a five circuit resistance bond box to afford current to each lateral. The deep bed design would consist of drilling an eight inch hole to a depth of four hundred feet and installing twenty 2684 high silicon cast iron ANOTEC anodes center connected with dual insulated #8 Halar wire. Calcined petroleum coke breeze would be pumped from the bottom of the hole to surround the anodes and brought to a depth of two hundred and fifty feet. A bentonite plug would be set from the top of the coke column to surface. Loresco 1" Allvent would be run through the anode section and 1" schedule 40 pvc run to surface to vent generated gases. The surface completion would consist of setting twenty feet of eight inch schedule forty PVC casing surrounded by a concrete pad. Anode leads would terminate in a twenty circuit fiberglass enclosure complete with shunts for individual anode current output measurement. The system would be energized by a 100 volt/60 amp dc rectifier unit with AC/DC lightning protection, wired for 230 VAC service, individual volt and amp meters and housed in a standard galvanized case. The rectifier would be mounted to a power pole complete with disconnect, conduit and grounding. A five circuit negative resistance bond box would be installed with connections to each of five laterals at the BEU 156 site. Number 2 HMWPE cable would be used for these negative connections.

Darrell Crass Drilling Company, Inc.

P. O. Box 60031 · Midland, Texas 79711-0031 (432) 561-8703 Office · (432) 561-5258 Fax

The system would be energized and initial spot checks would be conducted at available test stations for potential measurements. Our price for this installation and initial testing is \$32,405.00. Tax, if applicable, has not been included. If vacuum truck services or disposal of drilling spoils, such services will be additional.

Darrell Crass Drilling Company hopes this proposal meets with your approval and we look forward to working with you.

Sincerely,

Darrell Crass President

Franks, William H

From:

Gage, Guy

Sent:

Monday, March 01, 2010 8:06 AM

To:

Franks, William H

Subject:

FW: New Mexico Water Well License

Attachments: BEU Deep Well Ground Bed.pdf

The vent piping is to vent any Chlorine gases that may form due to disassociation of Chloride salts in the surrounding soil. The vent piping allows a path for the corrosive gases to vent to reduce corrosive failure of the cabling and associated equipment.

From: Donna Clark [mailto:donna@darrellcrassdrilling.com]

Sent: Friday, February 26, 2010 8:31 AM

To: Gage, Guy

Subject: New Mexico Water Well License

The New Mexico Water Well License number is WD-1261. If you need any more information please let us know.

Thanks, Donna

Cathodic Protection System Design Requirements

Ground Bed Design:

- 1. The ground bed located @ BEU 156 will be designed for a 20 year life span. This design will be based on covering the existing piping infrastructure plus an additional 25%. The current plans are to initially install this one ground bed and evaluate the system to see if there is a need to install additional beds. The design criteria will be based on a maximum "instant off "potential of 1.20 V CCSRE to prevent damage to the coating system. The minimum design potential on the system will be 0.85 V CCSRE. Station 156 has five laterals that radiate out of this location. I want to have five variable resistant feeds interconnected into each respective lateral that will allow current adjustment to each lateral.
- 2. The Contractor is required to provide all labor, equipment, and materials needed to prepare the surface location of the well. BOPCO will be responsible for purchasing and installing access to the ground bed location, if needed.
- The Contractor is required to provide all the labor, equipment, and materials to install the ground bed. The Contractor will be responsible for submitting any applications (permitting) required for the installation of the ground bed. BOPCO will be responsible for any surface right acquisitions and costs.
- 4. The Contractor will be responsible for the labor, equipment, and materials needed to provide electrical service to the ground bed site. The Contractor will be required to provide a fused disconnect, wiring, conduit, overload protection, and all other necessary electrical devises needed to insure a quality installation. Lightning protection/surge suppression equipment will be required on all applicable electrical systems. Every attempt will be made to prevent any damage to the electrical infrastructure of the ground bed and associated equipment.
- 5. The Contractor will be responsible for installing the transformer, rectifier, anode wire junction box, and support infrastructure for the electrical equipment. The rectifier will be housed in a NEMA 4x enclosure. The rectifier will be required to have permanent voltage and current indication. I think that we should also consider having current control. BOPCO will review the submitted electrical equipment specifications and will be required to sign off any equipment prior to installation.
- 6. BOPCO will not allow any down hole wire splicing unless BOPCO pre-approves the splice design. The wire insulation will be required to be compatible with the corrosive conditions that exist in the well. The wiring configuration of the anodes will be done in a manner to prevent catastrophic failure of the anodes.
- The Well will be required to have adequate gas ventilation to prevent premature failure.
- 8. BOPCO will be responsible for the installation of insulating flanges throughout the system to prevent excessive current draw.

Potential Survey:

- 1. The initial nativity survey has been completed.
- 2. Contractor will be responsible for starting up the CP system and doing the initial spot checks.
- 3. Contractor will be responsible for returning to perform the polarization survey and inspecting all foreign line crossing.
- 4 The survey locations will be identified by two means. The first identification will be a general lateral identification. The second will be a lat/long identification based on a NAD 27 Datum.
- The survey data will be input into a format that will be compatible with window excel and this file will be provided to BOPCO upon completion of the polarization survey. Omitted