#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

**OCD** Artesia

DR

ATS-08-521 RM OMB NO. 1004-0136

5 Lease Serial No.

Expires November 30, 2000

APPLICATION FOR PERMIT	TO DRILL OR	REENTER		NMNM0281482A		
la Type of Work X DRILL	REENTER	R-111-POTAS		If Indian, Allotee o	r Tribe Na	me
	Other X S	ingle Zone Multiple Zon	7	Unit or CA Agreen	ient Name	and No.
2. Name of Operator		16606	8.	Lease Name and W		
OXY USA Inc. 3a. Address		16696  3b. Phone No. (include area co	de)	Mobil Federa	] #ና	
P.O. Roy 50250 Midland TX 79710-0250		<u>432-685-5717</u>		API Well No. 30-015- <b>37</b>	339	
4. Location of Well (Report location clearly and in accordan	ice with any State equ	it ememor CEIVED	10	Field and Pool, or I	Explorator	······································
At surface 1980 FNL 1650 FEL	SWNF(G)	''LOLIVEL	11	Sand Dunes D	elaware	, West
At proposed prod. zone		OCT 1 4 2009	11.	Sec., T., R , M , or Sec 29 T23S		urvey or Are
14 Distance in miles and direction from nearest town or post o	ffice*	NMOCD ARTESI	A 12.	County or Parish	13 State	;
20 miles north		ng. NM		ldy	NM	
15 Distance from proposed* location to nearest		No. of Acres in lease	17 Spacia	ng Unit dedicated to	this well	
property or lease line, ft. (Also to nearest drg. unit line, if any)	Õ	320		40		
18. Distance from proposed location*	19.	Proposed Depth	20.BLM	/BIA Bond No. on	file	
to nearest well, drilling, completed, applied for, on this lease, ft	·	8300'		ES013	36	
21 Elevations (Show whether DF, KDB, RT, GL, etc.	22	. Approximate date work will sta	rt*	23. Estimated dur	ation	
3344.7' GL	_	8/09			45	
	24. At	tachments				-
The following, completed in accordance with the requirements	s of Onshore Oil and	Gas Order No. 1, shall be attache	ed to this fo	orm:		
Well plat certified by a registered surveyor		4 Bond to cover the operati	ions unless	covered by an exis	ting bond o	on file (see
2. A Drilling Plan		Item 20 above)		Ž	Ü	· ·
3. A Surface Use Plan (if the location is on National Forest S		5 Operator certification.	<b>.</b>	., .		11 4
SUPO shall be filed with the appropriate Forest Service C	office)	6 Such other site specific in authorized officer	nformation	and/or plans as ma	y be require	ed by the
25. Signuature	Name	(Printed/Typed)		Date	,	
Vi STI	Davi	d Stewart			5/15	109
Title			******			<del></del>
Sr. Regulatory Analyst						
Approved by (Signautre) Is/ Linda S.C. Rund	ell Name	(Printed/Typed)		Date	CT	7 2009
STATE DIRECTOR	Office	NM STATE	OFFIC	Æ		
Application approval does not warrant or certify that the appronduct operations thereon	licant holds legal or e	equitable title to those rights in	-	t lease which would	l entitle the	e applicant to

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowlingly 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 Reverse)

Carlsbad Controlled Water Basin

Conditions of approval, if any, are attached

the usper of boath and a 5 402 En F. W. C. 2 1/24

Sample of the second

SEE ATTACHED FOR CONDITIONS OF APPROVAL **APPROVAL SUBJECT TO GENERAL REQUIREMENTS** AND SPECIAL STIPULATIONS **ATTACHED** 

APPROVAL FOR TWO YEARS

District | 1625 N. French Dr., Hobbs, NM 88240 District || State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Resources Department Revise

N DIVISION Submit to Appro

1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease-4 Copies
Fee Lease-3 Copies

AMENDED REPORT

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

1301 W. Grand Avenue, Artesia, NM 88210

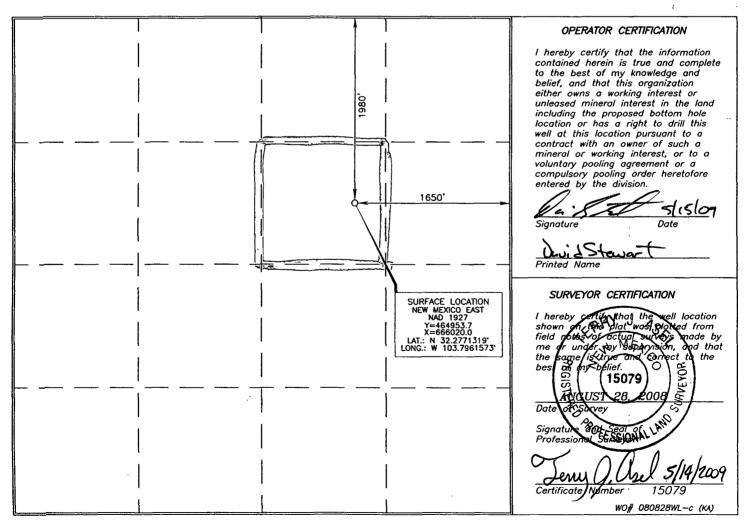
				WELL L	OCATION AND	ACRE	AGE DEDIC	CATION PLAT	Γ			
	API	Numbe	r		Pool Code				Pool Name			
30-0	<b>!</b> ラー	3	1339	5	3815			and Dun	es Dela	س صر	, We	st
Proj	perty Coo	de				Property	Name				We	ell Number
3048	કરહ					1	MOBIL FI	EDERAL				9
OG	GRID No.					Operator	Name					Elevation
160	696	•			OXY	USA	INC.				3	344.7'
					Su	rface	Location	. ₹				
UL or lot no.	Section	To	wnship		Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	t line	County
G	29	23 .	SOUTH	31 EAS'	r, N.M.P.M.	}	1980'	NORTH	1650'	EA	ST	<b>EDDY</b>

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 or Infill | Consolidation Code | Order No. | Consolidat

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.



United States Department of the Interior Bureau of Land Management Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220

Attention: Linda Denniston

RE: Mobil Federal #9

Eddy County, New Mexico

#### STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

**OPERATOR NAME:** 

OXY USA Inc.

ADDRESS:

P.O. Box 4294

Houston, Texas 77210-4294

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

**LEASE NO.:** 

NMNM 0281482 A

**LEGAL DESCRIPTION:** 

1,980' FNL & 1,650' FEL (SWNE)

Section 29-T23S-R31E Eddy County, New Mexico

**FORMATIONS:** 

None

**BOND COVERAGE:** 

Nationwide

**BLM BOND FILE NO.:** 

ES 0136

OXY USA Inc.

**AUTHORIZED SIGNATURE:** 

Donna G. Havins

TITLE:

Land Negotiator

DATE:

May 14, 2009

cc: David Stewart

#### DRILLING PROGRAM

Operator Name Lease Name/Number

Pool Name/Number:

 OXY USA Inc.
 16696

 Mobil Federal #9
 304898

Sand Dunes Delaware, West 53815

Surface Location: 1980 FNL 1650 FEL SWNE (G)

Sec 29 T23S R31E

Proposed TD: SL - Lat: 32.2771319 8300, TAD

8300' TMD

Elevation: 3344.7'GL

Federal Lease No. NMNM0281482A

Long: 103.7961573

X=666020.0

Y=464953.7

NAD - 1927

#### 1. Geologic Name of Surface Formation:

a. Permian

#### 2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	<u>Depth</u>	<u>Type</u>
a. Upper Permian Sand	350'	Water
b. Anhydrite	3853'	Oil
c. Delaware	4035'	Oil
d. Bell Canyon	4107'	Oil
e. Cherry Canyon	4984'	Oil
f. Brushy Canyon	6275'	Oil
g. Bone Springs	7938'	Oil_

#### 3. Casing Program:

Hole Size	<u>Interval</u>	OD Csg	<u>Weight</u>	Collar	<u>Grade</u>	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	400'	11-3/4"	42#_	ST&C	H40	New	7.48	9.88	2.6
10-5/8"	4000'	8-5/8"	32#	LT&C	J55	New	2.32	1.31	2
7-7/8"	8300' 7DVT-3950'	5-1/2"	17#	LT&C	J55	New	1.27	1.4	1.94
	1					L			L

> See COA

#### 4. Cement Program

a. 11-3/4" Surface Circulate cement to Surface w/ 350sx PP w/ 2% CaCl2., 14.8 ppg 1.34 yield

b. 8-5/8" Intermediate Circulate cement to surface w/ 930sx HES light PP w/ 5% Salt + 5#/sx Gilsonite + .125#/sx Poly-E-Flake 12.9 ppg 1.87 yield followed by 200sx PP, 14.8 ppg 1.32 yield.

c. 5-1/2" Production Cement 1st stage w/ 260sx IFH w/ 5# Gilsonite + .125#/sx Poly-E-Flake, 11.5 ppg

2.80 yield followed by 370sxSuper H w/ .5% LAP-1 + .4% CFR-3 + 5#/sx Gilsonite +

3#/sx Salt + .25% D-AIR 1, 13.2 ppg 1.65 yield. Cement 2nd stage w/ .230sx IFC w/

.5% LAP-1 + .25#/sx CFR-3 11.5ppg 2.78 yield followed by 100sx PP 14.8 ppg 1.32 yield

Estimated TOC @ Surface. — 2nd Stage 280sx / 150sx per operator 6/29/09

The above cement volumes could be revised pending the caliper measurement.

#### 5. Pressure Control Equipment:

Surface 0-400'

None

Production 400-8300'

11" X 5M Double Ram, 11" X 3M Annular, 5M Choke Manifold

All BOP's and associated equipment will be tested to 1200psi with the rig-pump before drilling out the 11-3/4" casing shoe. Prior to drilling out the 8-5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

Pipe Rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having a 5000 psi WP rating.

See COA

Request variance to connect BOP outlet to the choke manifold a flex line that is manufactured by Contitech Rubber Industrial KFT. It is a 3" ID X 35' flexible hose rated to 10000psi working pressure. It has been tested to 15000psi and is built to API Spec 16C. Once the flex line is installed, it will be tied down with safety clamps, certification attached.

#### 6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u> ppg	<u>Visc</u> sec	<u>Fluid</u> Loss	Type System	
0-400'	8.4-8.8	32-34	NC	Fresh Water/MI Gel Spud Mud	
0-400	0.4-0.0	32-34	NC	rresii vvatei/ivii Ger Spud iviud	· ·
400-4000'	9.9-10.0	28-29	NC	Brine Water	
4000-7900'	8.4-8.5	28-29	NC	Fresh Water	
7900-8300'	9.5-9.6	32-36	10-15	FW Mud/Duo Vis/Poly Pac R	

The necessary mud products for weight additional and fluid loss control will be on location at all times.

#### 7. Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- c. Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached.

## 8. Logging, Coring and Testing Program: $\leftarrow S_{ee}$ COA

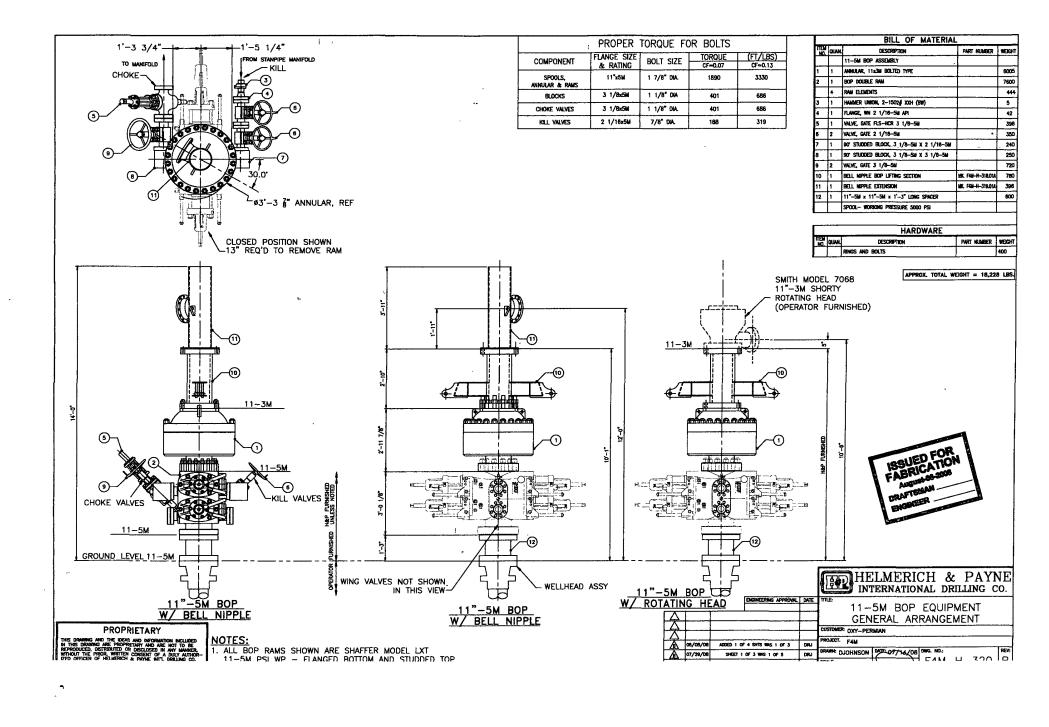
- a. Drill stem tests are not anticipated but if done will be based on geological sample shows.
- b. The open hole electrical logging program will consist of Triple Combo CNL\LDT\DLL.
- c. No coring program is planned but if done will be sidewall rotary cores.
- d. Mud logging program will be initiated from 4000' to TD.

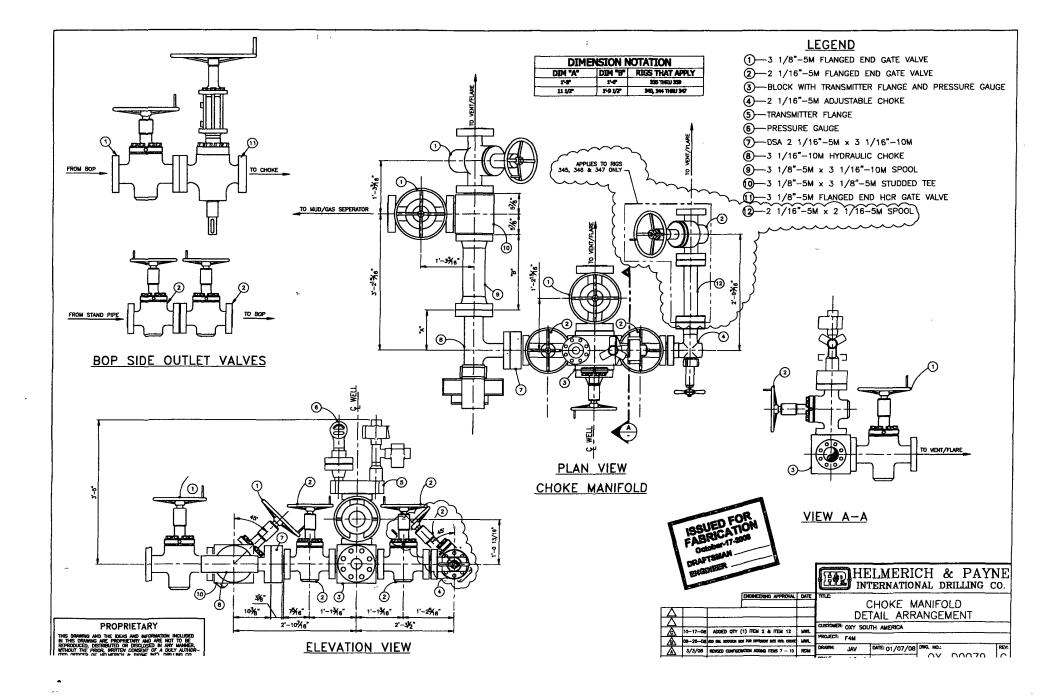
#### 9. Potential Hazards:

No abnormal pressures, temperatures or  $H_2S$  gas are expected. The highest anticipated pressure gradient would .55psi/ft. If  $H_2S$  is encountered the operator will comply with the provisions of Onshore Oil & Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

#### 10, Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 45 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.





## CERTIFICATE OF CONFORMITY

Supplier : CONTITECH RUBBER INDUSTRIAL KFT.

Equipment: 6 pcs. Choke and Kill Hose with installed couplings Type: 3" x 10,67 m WP: 10000 psi

Supplier File Number : 412638

: April. 2008 Data of Shipment Phoenix Beattle Co. Customer : 002491

Customer P.o. Referenced Standards

/ Codes / Specifications : API Spec 16 C Serial No.: 52754,52755,52778,52777,52778,52782

#### STATEMENT OF CONFORMITY

We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these itsms/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date: 04. April, 2008

Position: Q.C. Manage

-4- PM	osnix Bea	ttle	Material	Iden	tification	on Certifi	cate			
PA No   008	330 Citions Hi	LMERICH & PA	YNE INT'L DRILLING	Client	hef 3:	0-369-001			Pege	1
Pert No HP16000A-25-4F1	Description  2" HEX HEX COX HEME A MER COX.	Material Deco	Material Spec	1	WO No	62777 /Mag/A	Test Cert No	MATERIAL STATES	Drg No	leaus No
50103-1070 50703-10808 50703-10808	CLETTING & SWELT EQUIPMENT TO SWEETY CLARP ESSEN 7.55T SWEETY CLARP LINES 7.5TT	CARREN STEEL		1	2449 2514 2942	902400 1025 1025		este es		
	<u> </u>				<del> </del>	<b></b>				
					‡==				<b> </b>	
		<del>                                     </del>							<b> </b>	
			L				I		I	

ds have been inspected by our Quality Management System, and to the best of our knowl n the requirements of the purchase order as issued to Phoenix Beattle Corporation.





Rute Technology

Quality Document

INSPECTION		CONT TEST		_	CATE		CERT.	Nº:	746	3	
PURCHASER:	Phos	nix Bos	stale C	a.			P.O. Nº	:	00249	n	
CONTITECH ORDER Nº:	41281	18	нов	E TYPE:	3*	Đ	Ch	oks and	KB Ho	90	
HOSE SERIAL Nº:	5277	7	NOM	SVAL / AC	TUAL L	ENGTH		10,67	m	-	
W.P. 68,88 MPa	10000	pal	T.P.	103,4	MPs	15000		Durotter	r (	<b>30</b> ~	m
Prezeuse test utili water s ambiani tampendare	ŧ										
		See	ettac	hment	. (1 pe	ge)					
							,				
											-
t 10 10 h	<b>^</b> n										
† 10 mm = 10 k → 10 mm = 25 k											•
			-	COUP	LINGS						,
			Seriel A		LINGS	Q			<del></del>	Host NP	•
→ 10 mm = 25 N		917			LING8		4130			Float NP	,
→ 10 mm = 25 M	(Pa			•	LINGS		4130		т		,
→ 10 mm = 25 M  Type  3" coupling with	(Pa			•	UNG8	AISI	4130		т	7988A	
Type  3" coupling with  4 1/16" Fixings end	d d			•	UNG8	AISI	4130		T 2 API Sp	7998A 25984 Dec 16 C	
Type  3" coupling with  4 1/16" Fixings end	d d			•	LINGS	AISI	4130		T 2 API Sp	7988A 26984	
Type 3" coupling with 4 1/16" Flonge end INFOCHIP INSTAL	d LED	817		P 813		AISI	4130 4130	Te	T 2 API Sp ampera	7998A 25984 Dec 16 C	:"B"
Type  3" coupling with  4 1/16" Fienge on  INFOCHIP INSTAL.	d LED	917 448 868	N MAN	P 913		AISI	4130 4130	Te	T 2 API Sp ampera	7998A 25984 Dec 16 C	:"B"
→ 10 mm = 25 M Type 3" coupling with	d LED	917	N MAN	P 913		AISI - AISI	4130 4130	Te	T 2 API Sp ampera	7998A 25984 Dec 16 C	:"B"
Type  3" coupling with  4 1/16" Fisings one INFOCHIP INSTAL  I metal parts are Revises II central Test to ABO	LED ME HORS I	917	N MAN	P 913	ED M A	AISI - AISI	4130 4130	Te	API Spampera	7998A 25984 Dec 16 C	:"B"

Pegra: 1/

**   T977 Y 77   77   71   77   77   12   21   21

## - PHOENIX Beattle

Phoenix Beattle Corp

1338 artitizare fest fartus
teatia, 12 7993
teatia, 12 7

### **Delivery Note**

Customer Order Number   370-369-001	Delivery Note Number	903078	Page	1
Customer / Involce Address HEJERICH & PAYNE INT'L DRILLING CO 1407 SOUTH BOULDER TU.SA, OK 74119	Delivery / Address HELMERICH & PAWE IDC ATTH: JOE STEPHOISON - RII 18699 INDUSTRIAL ROND HOUSTON, TX 77015	i 170		

Customer Aco No	Phoenix Boattle Contract Manager	Phoenix Bestile Reference	Date
H01	331	006330	05/23/2008

Ho	Sectile Part Humber / Description	Oxty Ordered	Oty Seat	Qty To Follow
1	HPIOCX3A-35-4F1 3* 101 IBC CBX MDSE x 35ft ON CM 4.1/16* API SPEC FLAMSE E/ End 1: 4.1/16* 100ps1 API Spec 6A Type 6BX Flampe End 2: 4.1/16* 100ps1 API Spec 6A Type 6BX Flampe C/w 80155 Stendard ring groove at each and Suttable for MSS Service Working pressure: 10.000ps1 Test pressure: 15.000ps1 Test pressure: 15.000ps1 Aroun Gaunding: Included Fire Rating: Not Included Tresperature reting: -20 Deg C to +100 Deg C	1	1	0
	SECKS-MPF3 LIFTING & SAFETY EQUIPMENT TO SULT MPIOCKS-36-F1 2 x 160mx 10 Safety Clapse 2 x 140mx 10 Lifting Collars & elecent C's 2 x 17th Starinless Steel wire rope 3/4" 00 4 x 7.75t Shackles	1	1	0
	SC725-200CS SAPETY CLAMP 200M 7 25T C/S GALVANISED 	1	1	0

### --- PHOENIX Beattle

Form No 100/1

Pricentix Beattle C 1998 Britishers Park Briss Heaten, 17 7961. Petr (1992 397-1546 E-est) estiliphosphisettic con

## **Delivery Note**

Customer Order Number 370-369-001	Delivery Note Number	963078	Page	2
Cuetomer / Involop Address HEJERICH & PAYNE INT'L ORILLING CO 1437 SOUTH BOULDER TU.SA, OK 74119	Delivery / Address HELMERION & PANNE IOC ATTH: JOE STEPHENSON - RE 13669 INDUSTRIAL ADMO HOUSTON, TX 77015	6 370		

Customer Acc No	Phoenix Sectile Contract Manager	Phoenix Beattle Reference	Delle
HO1	?JT	006330	05/23/2008

Item No	Beattle Part Number / Description	City Ordered	City Sent	Oty To Follow
	SC725-132CS SAFETY CLAMP 132M 7.25T C/S GALVANIZED C/M BOLTS	1	1	0
	OCCERT-HYDRO HYDROSTATIC PRESSURE TEST CERTIFICATE	1	1	0
	OCCERT-LOAD LOAD TEST CERTIFICATES	1	1	0
	oofreight Indound / Outbound Freight Pre-Pay & and to final invoice Note: Material Nist & accompanied by paperiork including The Purchase order, Rig Mimber to Disure proper payment	1	1	0
		D.A	$\wedge$	

Phoenix Beattle Inspection Signature :

Received in Good Condition :

Bignature

All goods remain the property of Proceds Statcle until paid for in full. Any demage or electrises on this delivery must be advised within 6 days Reserrs may be subject to a handing charge.

#### SURFACE USE PLAN OF OPERATIONS

Operator Name	OXY USA Inc.	16696
Lease Name/Number	Mobil Federal #9	304898 Federal Lease No. NMNM0281482A
Pool Name/Number:	Sand Dunes Delaware, West	53815
Surface Location:	1980 FNL 1650 FEL SWNE (G)	Sec 29 T23S R31E

#### 1. Existing Roads

- a. A copy of a USGS "Los Medanos, N.M." quadrangle map is attached showing the proposed location. The well location is spotted on this map, which shows the existing road system.
- b. The well was staked by Terry J. Asel, Certificate No. 15079 on 8/28/08, certified 5/14/09.
- c. Directions to Location: From the the intersection of SH 128 and CR 798, go northwest on SH 128 for 3.9 miles. Turn left and go south on lease road for 0.4 miles. Turn right and go west .6 miles, turn left and go southeast .45 miles, turn left on proposed road and go east for .2 miles to location.

#### 2. New or Reconstructed Access Roads:

- a. A new access road will be built. The access road will run approximately 1100' from an existing road to the location. See Exhibit #2.
- b. The maximum width of the road will be 15'. It will be crowned and made up of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

#### 3. Location of Existing Wells:

Existing wells within a one mile radius of the proposed well are shown on Exhibit #3.

#### 4. Location of Existing and/or Proposed Production Facilities.

- a. In the event the well is found productive, the Mobil Federal tank battery would be utilized and the necessary production equipment will be installed at the well site. See proposed Production Facilities Layout diagram, Exhibit #4.
- b. If necessary, electric power poles will be set along side of the access road.
- c. All flowlines will adhere to API Standards, Exhibit #4

#### 5. Location and types of Water Supply.

This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations in the area and will be hauled to location by transport truck using existing and proposed roads.

#### 6. Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

#### 7. Methods of Handling Waste Material:

- a. A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility, see C-144 CLEZ.
  - 1. Solids CRI
  - 2. Liquids Laguna
- b. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up slats remaining after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Disposal of fluids to be transported will be by the following companies: TFH Ltd. Laguna SWD Facility

#### 8. Ancillary Facilities: None needed

#### 9. Well Site Layout

Exhibit #5 shows the proposed well site layout with dimensions of the pad layout and equipment location. V-Door-West Tanks-South

#### 10. Plans for Surface Reclamation:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- b. If the well is deemed commercially productive, caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.

#### 11. Surface Ownership

The surface is owned by the U.S. Government and is administered by the BLM. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas. The surface is leased to: Stacey Mills, LLC P.O. Box 1358 Loving, NM 88256.

They will be notified of our intention to drill prior to any activity.

#### 12. Other Information

- a. The vegetation cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial. native range grass. The topsoil is sandy in nature. Wildlife in the area is also sparse consisting of deer, coyotes, rabbits, rodents, reptiles, dove and quail.
- b. There is no permanent or live water in the general proximity of the location.
- c. There are no dwellings within 2 miles of the proposed well site.

d. A Cultural Resources Examination - this well is located in the Permian Basin MOA.

Pad + 1/4 mile road	\$1,300.00	\$0.15/ft over 1/4 mile _	\$0.00	\$1,300.00
Pipeline - up to 1mile	\$1,200.00	\$250 per 1/4 mile	\$0.00	\$1,200.00
Electric Line - up to 1mile	\$600.00	\$0.17/ft over 1 mile	\$0.00	\$600.00
Total	\$3,100.00	_	\$0.00	\$3,100.00

#### 13. Bond Coverage:

Bond Coverage is Nationwide Bond No. ES0136.

#### **Operators Representatives:**

The OXY Permian representatives responsible for ensuring compliance of the surface use plan are listed below.

Larry Sammons Van Barton
Production Coordinator Production Coordinator

P.O. Box 1988 P.O. Box 1988
Carlsbad, NM 88220 Carlsbad, NM 88220
Office Phone: 505-887-8337 Office Phone: 505-887-8337

Cellular: 575-390-8397 Cellular: 575-706-7671

Fetus Hagan Calvin (Dusty) Weaver
Drilling Superintendent Operation Specialist
P.O. Box 4294 P.O. Box 50250

Houston, TX 77210 Midland, TX 79710

Office Phone: 713-366-5946 Office Phone: 432-685-5723

Cellular: 281-460-4291 Cellular: 806-893-3067

Carmilo Arias

Drilling Engineering Supervisor Drilling Engineer
P.O. Box 4294 P.O. Box 4294

Houston, TX 77210 Houston, TX 77210
Office Phone: 713-215-7235 Office Phone: 713-366-5953

Cellular: 281-467-6383 Cellular: 281-468-4652

Richard Jackson

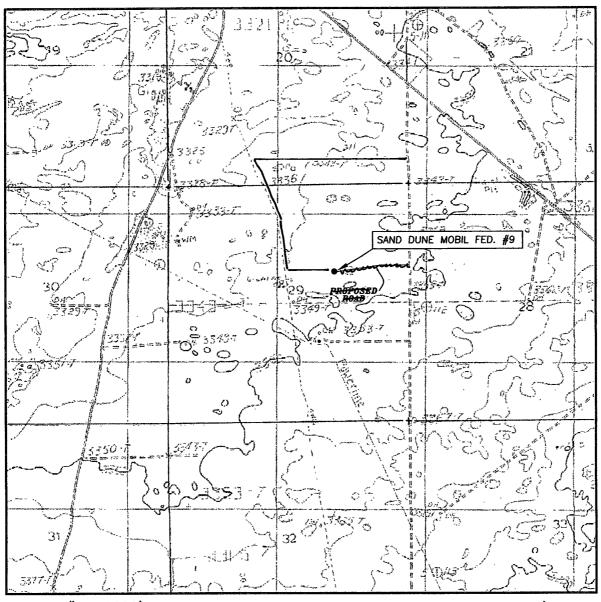
#### **OPERATOR CERTIFICATION**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 14th day of May, 2009.

Name: Denise Woods Wenis Woods
Position: RMT Leaader
Address: 5 Greenway Plaza, Ste. 110, Houston, TX 77046
Telephone: 713-215-7154
E-mail: (optional): denise_woods@oxy.com
Company: OXY USA Inc.
Field Representative (if not above signatory): Larry Sammons
Address (If different from above): 102 S. Main St., Carlsbad, NM 88220
Telephone (if different from above): 575-887-8337
E-mail (if different from above): larry_sammons@oxy.com

1

## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 29 TWP. 23—S RGE. 31—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FNL & 1650' FEL

ELEVATION 3344.7'

OPERATOR OXY USA INC.

LEASE SAND DUNE MOBIL FED. #9

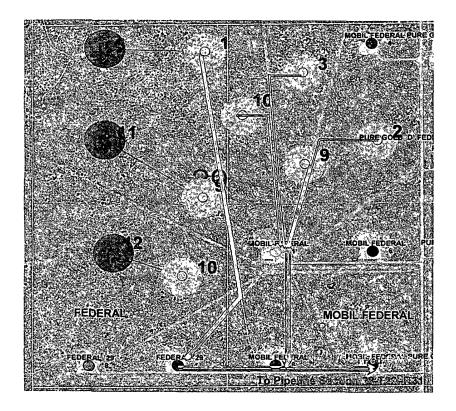
U.S.G.S. TOPOGRAPHIC MAP

LOS MEDANOS, N.M.



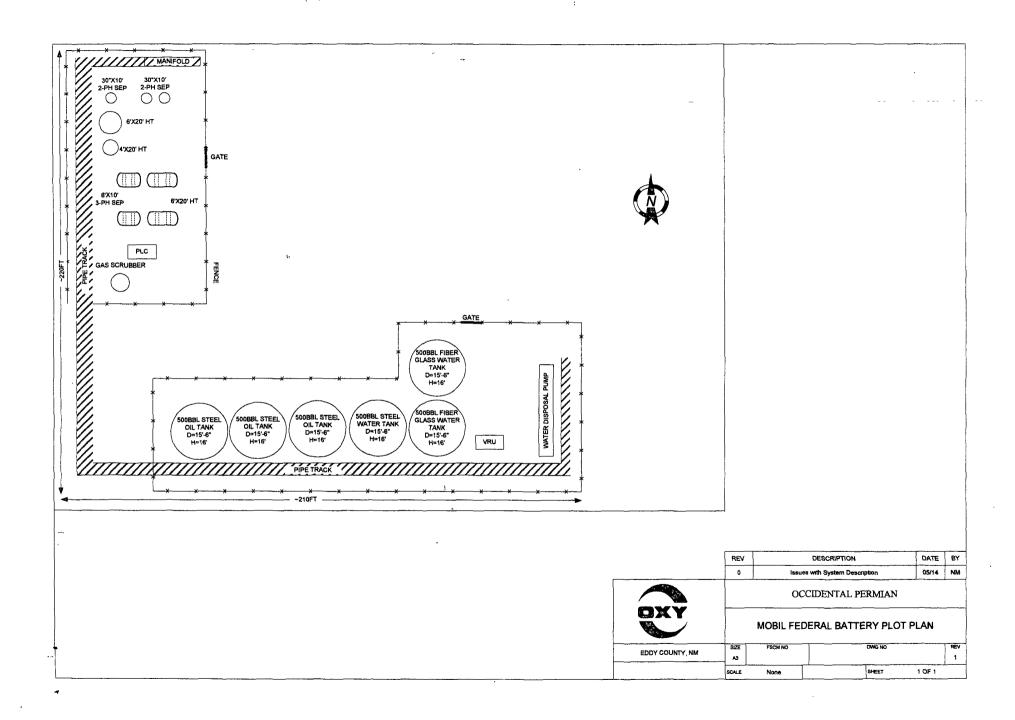
1				7	201			1		<del> </del>		10
									φ'		•	ੋ
	25%	.			-						6	Ĭ
	<u> </u>			1	00%						4	40
36		31	32	2	⊕ 335	6 6	₫ 34 <sub>€</sub>		•" •35°	•	e 36s	<b>\$</b>
	259					ં ં •	, e' e	e"	ခံုခံ ခံ		ഒ് ക്	000%
<b>⇔</b>	<b>.</b>	^			<b>~</b>	0 100% B	PO 6		50% o o	9	ခံ ခံ ခဲ	o 100%
j	] ,			े ले	o	750% AE	ို ငံ	6	6 6 9	9	<b>એ</b> એ	0 100%
<del>9</del> 1		6	5		0 0 49	9,6,	- 30	Θ,	6 g 2	9	s s 1s	•
ė	<b>\$</b>			<u> </u>			•••	<b>e</b> ,	<b>•</b> • •	6		70%
<b>⊕</b> ^² o'	l			<b>  </b>	ë i i i i			•	• • •	6,	88%	
<b>ĕ</b> ₩ ĕ				]			. I I •	9,	6 100%	• .	•	A
e" e" 12		7	transfer.	3	9		Ø50%31	50%	11		O" 12	00% SR 50% DR
e" e"		ļ	THERE				6			87%	9% 💢	<b>1</b>
<b>o</b> ""	ರ ರ					357			•	831	0"	10
່ # ∂	14 e										79%, - eiei	
136	-~-	18	1	7	16		15		14	•	6 6 23	•
					_							丁
,						'ب				-0		
	,									o <u>"</u> ∈	= •	100%
246		19	20		21		22	0"-	9" 9" <sub>23</sub>	0"	• <b>2</b> 4	• 0
0.00	1							ō,,	· · · · · · · ·	•	• •	100°
						]		0,-	100% -O O •	•	50% "	
								Θ <u>"</u>	⊙' ⊙' ●	<b>.</b> .	•" •"	00% 5 O
25	,	30	2	9	28		27	•	•' • ' 26	• (	<b>9</b> 25	P; .
o 🖸 🕶 🗯	1	.	-					•	• •	<b>6</b> ~	ø	. •
*\$€. • •				ļ	:			e	100%	1.7	100%	100%
" <b>``@</b> ` •						]						
36 <sup>8</sup>		31	3:	2	33		34	1.	35	5	36	
<b>⊚</b> ∘ ∰									Ċ	(		
6 9 9 9 0	ł			1		ø	•		100%		<b>ම</b> '	Ģ-
<b>.</b> • ¥.											ർ ഠ്	<b>\$</b>
• •	•" O" (	o 6	5		o" <b>4</b> 0	Ou (	<sup>)"</sup> 3		o • 76	. •	ੈ ਹ <b>ੈ</b> 1	
<b>6</b> • *	•	<b>举</b>	ø						ં <b>ે</b>	•"	<b>•</b> • • •	
<b>*</b>	* •	e"				-			ರ ಈ ∜	6	o" o" o	
					<b>#</b>	L			<b>©</b> "•	ø" -	oo*	9
12	- **	7₀"	8	, <sub>(8)</sub>	. 9		10		11		e e 125	9 0
	1		\ °	•	ď	}			<b>ø</b> d	•	o" e o"	•
			<b>●</b> *8	ŧ],,ø (	<b>i</b>		•"	o"	ø"	茶	e e e	6
	L	<del>*</del> -	ຶ • ້ •	<b>"</b> • ,	<b>.</b>		ď	1	<b>.</b>	<del>ې</del>	ੈਂ 🔞	•
13		18	<b>6</b> • 17	• • • •	• 16	• 6	<b>e</b> 15		o 14		, 13	
				• ₩ •	• •	9 9	• ဝံ		<b>é</b> d	o.	* * .	
	ł		60%			ø" g	` <b>•</b> •	o	☆ • •	•"	• • •	
	<u> </u>		• *	•		•" •	<b>6</b> 0	+	• • •	6"	• •	•
24	B	19	<b>(2)</b>	<b>4</b> 🐃		• •	<b>6</b> 225	o"	• • <u>2</u> 3	0	• • 2	<b>4</b> o
*	ì						- 2 - 2	( **	a" a"	. 6 .	<b>5</b>	á i
			<b>©</b> 0	90	<b>,</b> ,⊚	• •		_		100	*ö'	19 1
			0 0 1000	<b>9</b>	9 0 0	• • • •		ď	· ##	100	o o	
			100X <sup>©</sup>		<b>9</b> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	• • • • • •		o"	* ***	100	Ö	
25		30	100%		9 6 6	• • • • • •			go Producing			
25			1000 (S)		<b>9</b> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	• • • • • • • • • • • • • • • • • • •	Los	t Tank	, Neff & Sand I	Junes Pa	ospects	
25			(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c		<b>9</b> 6 6 6 7 128	d		t Tank Edd	, Neff & Sand I ly County, Ne	Dunes Pa W Mexic	ospects o	reement
			100%		<b>9</b> 6 6 6 7 128	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Locations for Locations for Locations w	Edd Edd or Verti or Direc oth Acc	, <b>Neff &amp; Sand I</b> <b>ly County, Ne</b> ical Wells in Pol tional Wells in i proved APD's vi	<b>Dunes Pro W Mexico</b> ash Area Potash Ar a prior Mo	ospects o via Potash A ea via Potash saic Potash D	greement Agreement
25			100%		<b>9</b> 6 6 6 7 128	00000	Locations for Locations for Locations w Wells Drille Producing (	Edic Edic or Vertion Direction Approximation Di Well	, Neff & Sand I Iy County, Ne ical Wells in Pol tional Wells in I proved APD's vi pleted pursuant	<b>Dunes Pa W Medic</b> ash Area Potash Ar a prior Mo to prior M	ospects o via Potash Aç ea via Potash osaic Potash Dosaic Potash	Deal
		30				00000	Locations for Locations of Locations w Wells Drille Producing ( Deep Gas )	Edic For Vertion Direct of Direct of App of Comp Oil Well Well Re	, Neff & Sand I ly County, Ne ical Wells in Pol stional Wells in I proved APD's vi deted pursuant i ecomplated as E	<b>Dunes Pa W Medic</b> ash Area Potash Ar a prior Mo to prior M	ospects o via Potash Aç ea via Potash osaic Potash Dosaic Potash	Deal
		31					Locations for Locations of Locations w Wells Drille Producing ( Deep Gas V Water Disp Deen Prod	E Tank Edd or Verti or Direct of App d/Comp Oil Well Well Re osal W busing (	, Neff & Sand I ly County, Ne ical Wels in Po ctional Wels in I proved APD's vi beted pursuant i completed as E el Sas Well	<b>Dunes Pa W Medic</b> ash Area Potash Ar a prior Mo to prior M	ospects o via Potash Aç ea via Potash osaic Potash Dosaic Potash	Deal
36		31					Locations for Locations of Locations w Wells Drittle Producing ( Deep Gas N Water Disp Deep Prod Plugged (	Edd or Vertion Direct or D	, Noff & Sand I ly County, Ne ical Wells in Pol tional Wells in I troved APD's vi leted pursuant i completed as E el Gas Well	<b>Dunes Pa W Medic</b> ash Area Potash Ar a prior Mo to prior M	ospects o via Potash Aç ea via Potash osaic Potash Dosaic Potash	Deal
		31				○	Locations for Locations of Locations with the Locations of Wells Drille Producing (Deep Gas ) Water Disp Deep Producing of Plugged C Plugged C (1) Cross-Hat	Edd or Vertion Direct or Direct of Composith App of Well Recosal Wi busing Co of Well deep Gi cting do	i, Neff & Sand II iy County, Ne ical Wells in Pol stional Wells in I rowed APD's vi ideted pursuant i scomplated as E el Gas Well as Well issowes Yates (50)	Dunes Pa W Mexico ash Area Potash Ar a prior Mo to prior M lelaware C GuPogo (50	ospects o via Potash Agea via Potash saic Potash sosaic Potash osaic Potash oli Well or Sail	Deal
36		31		\$ <b>3</b>	90% 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		Locations for Locations of Locations of Locations were well by Wells Dribe Gas 1 Deep Producing (Deep Producing of Plugged Deep Producing of Location (1) Cross-Haff (2) Potents A	Eddoor Vertion Direction Direction App of Well Record Well Record Well Record Well Record Well Record Well Record Well Well Record Well Well Record Well Well Well Record Well Well Well Record Well Well Well Well Well Well Well Wel	i, Neff & Sand II iy County, Ne ical Wells in Pol tional Wells in II trowed APD's vi deted pursuant i completed as E el Gas Well is SWell	Dunes Pa W Medico ash Area Potash Ar a prior Mo to prior M delaware C QPogo (50	ospects  via Potash A ea via Potash A saic Potash I osaic Potash I osaic Potash  ii Well or Sait  iii Potassium L ement Incident	Deal

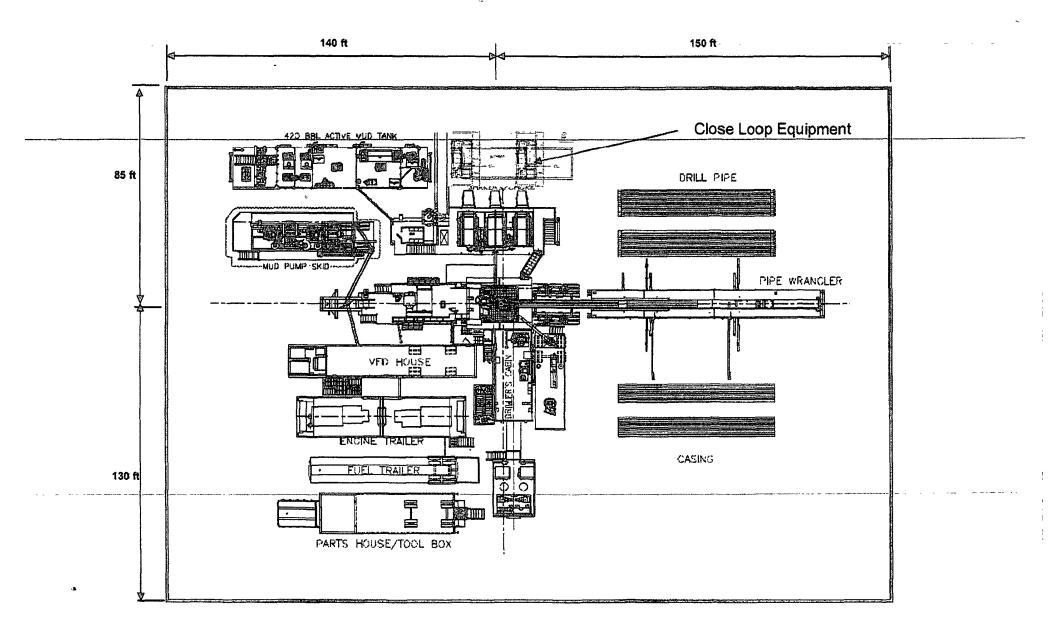
•

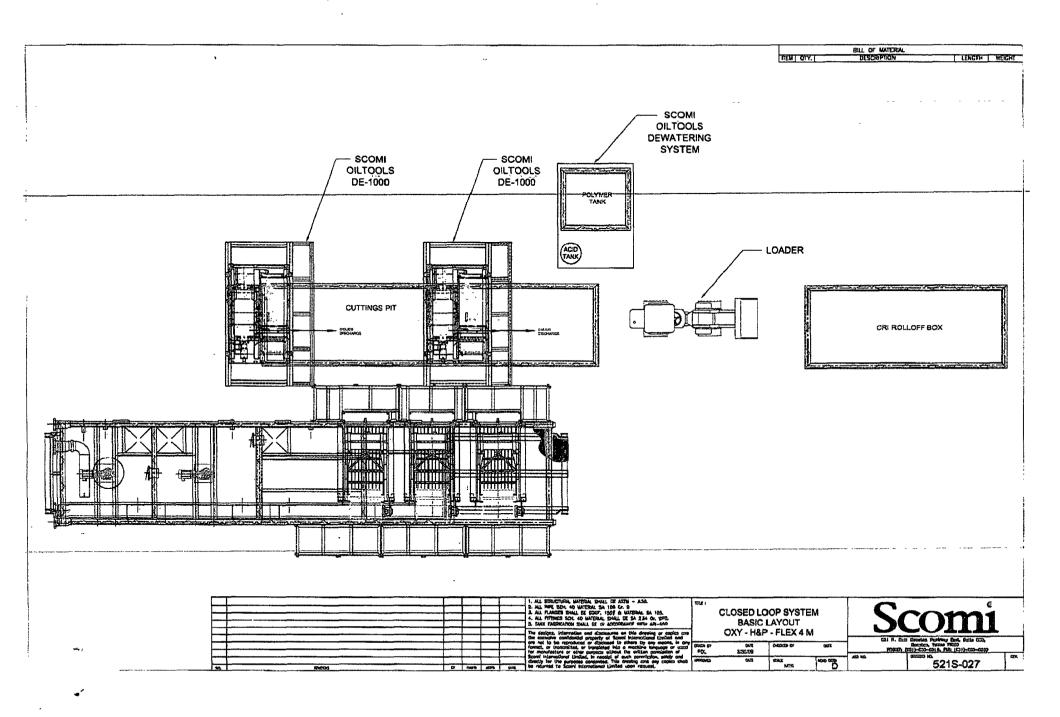


#### FLOWLINES DETAILS

FROM	TO	FLUID	LINE SIZE	LINE LENTH	MATERIAL	PSI RATING	BURIED
FEDERAL 29-1	FEDERAL 29-8	PRODUCTION	4"SDR7	1 209	HDPE	LOW	NO
FEDERAL 29-5	FEDERAL 29-8	PRODUCTION	4"SDR7	1 209	HDPE	LOW	NO
MOBIL FEDERAL 29-2	FEDERAL 29-8	PRODUCTION	4"SDR7	0 4MILES	HDPE	LOW	NO
MOBIL FEDERAL 29-3	FEDERAL 29-8	PRODUCTION	4"SDR7	0 2MILES	HDPE	LOW	NO
MOBIL FEDERAL 29-9	FEDERAL 29-8	PRODUCTION	4"SDR7	0 2MILES	HDPE	LOW	NO
MOBIL FEDERAL 29-10	FEDERAL 29-8	PRODUCTION	4"SDR7	0 1MILES	HDPE	LOW	NO
MOBIL FEDERAL 29-8	MOBIL FED SWE	WATER			HDPE	LOW	YES
MOBIL FEDERAL 29-8		GAS			HDPE	LOW	YES







## OXY Permian

# EMERGENCY ACTION PLAN

## **POTASH AREA**

Federal 23
Federal 29
Lost Tank 3 Federal
Lost Tank 4 Federal
Lost Tank 10 Federal
Lost Tank 11 Federal
Mobil Federal

## **DRILLING/WORKOVER**

## DRILLING AND CRITICAL WELL OPERATIONS

Bureau of Land Management RECEIVED

MAY 18 2009

Carlsbad Field Office Carlsbad, NM

05/18/2009 Page 1 of 15

# DRILLING/WORKOVER DRILLING AND CRITICAL WELL OPERATIONS

## **EMERGENCY ACTION PLAN**

## TABLE OF CONTENTS

<u>ITEM</u>	PAGE
PREFACE	. 3
EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES	. 4
SPECIFIC EMERGENCY GUIDANCE - Well Control	. 5
- Well Control - H2S Release	. 6
- Personal Injury or Death - Fire or Explosion - Spills	. 1 . 7 . 7
- Spills - Hydrocarbon Vapor Cloud Release - Bomb Threat - Natural Disasters – Tornadoes and Thunderstorms	. 8
PUBLIC RELATIONS	. 9
PHONE CONTACTS – OP DRILLING/WORKOVER	. 10
PHONE CONTACTS – OP PRODUCTION AND PLANT PERSONNEL	. 11
PHONE CONTACTS – OP HES PERSONNEL	. 13
MAP	22

#### **PREFACE**

An effective and viable Emergency Action Plan (EAP) is intended to provide prior planning and guidance in responding to emergency incidents. The primary considerations in its development are protection of personnel, the public, company and public property, and the environment.

Although the plan addresses varied emergency situations that may occur, it recognizes that flexibility and the use of the organization's knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework, which may be placed into operation without confusion. These actions should promote quick and decisive actions during the critical initial period and immediately following an emergency. As the response progresses, additional guidelines and procedures may need to be implemented as the situation dictates. In addition, all emergency incidents must be properly reported per the Oxy Incident Reporting and Notification Policy, state and federal requirements, etc.

The following procedures are provided as Oxy Permian's minimum expectations. The Contractor's own procedures may be utilized in lieu of Oxy Permian's, provided that it meets or exceeds the minimum deliverables. It should be understood that this list is not all-inclusive, but the overall plan should assist in lateral application to similar incidents.

This EAP is intended for use on Oxy Drilling/Workover projects and the operations within their area of responsibility, such as drilling, critical well work, etc.

05/18/2009

#### EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES

#### Activation of the Emergency Action Plan

- A. In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections on pages five (5) through nine (9) in this document for further responsibilities:
  - 1. Notify the senior ranking contract representative on site.
  - 2. Notify Oxy representative in charge.
  - 3. Notify civil authorities if the Oxy Representative cannot be contacted and the situation dictates.
  - 4. Perform rescue and first aid as required (without jeopardizing additional personnel).

#### General Responsibilities

#### Oxy Permian Personnel:

- A. Drill Site Manager: The Oxy Drilling/Critical Well Servicing Operations Specialist or contract personnel serving in that capacity will serve as Operations Chief Officer for all emergency incidents. The Operations Chief Officer is responsible for:
  - 1. Notification to the Drilling/Workover Team Leader of the incident occurrence.
  - 2. Notification to the local RMT/PMT leader of the incident occurrence, and the need for the designated local RMT/PMT Incident Commander to act in that capacity for the response effort.
  - 3. Sole control of all tactical activities directed toward reducing the immediate hazard, establishing situational control and restoring the operations to a non-emergency state.
- B. Local RMT/PMT Designated Incident Commander: The Oxy local RMT/PMT Designated Incident Commander will serve as the overall Incident Commander for the drilling or critical well servicing emergency incident. The Incident Commander is responsible for:
  - 1. Coordinating with the Drilling Manager for notification to the Oxy Crisis Management team of the incident occurrence.
  - 2. Establishing and managing the overall incident command structure and response from inception through restoration of normal activities in the area.
- C. Drilling/Workover HES Tech: The Drilling/Workover HES Tech (or his designate) is responsible for reporting to the incident as soon as reasonably possible, to provide support to the response effort as required by the Operations Chief Officer or the Incident Commander.

Contract Drilling Personnel will immediately report to their assigned stations and perform their duties as outlined in the appropriate Specific Emergency Guidance sections on pages five (5) through nine (9) in this document.

Other Contractor Personnel will report to the safe briefing area to assist Oxy personnel and civil authorities as requested when it is safe to do so and if they have been adequately trained in their assigned duties.

Civil Authorities (Law Enforcement, Fire, and EMS) will be responsible for:

- 1. Establishing membership in the Unified Incident Command.
- 2. As directed by the Incident Commander and the Unified Command, control site access, re-route traffic; and provide escort services for response personnel.
- 3. Perform all fire control activities in coordination with the Unified Command.
- 4. Initiate public evacuation plans as instructed by the Incident Commander.
- 5. Perform rescue or recovery activities with coordination from the Unified Command.
- 6. Provide medical assistance as dictated by the situation at hand.

05/18/2009 11/2009 Page 4 of 15

#### WELL CONTROL

The following procedures will be implemented when a loss of primary control is indicated. Indicators of loss of primary control are flow from the well, an increase in pit volume, or when the drilling fluid used to fill the hole on trips is less than the calculated pipe displacement volume. The emergency signal for well control procedures will be a single long blast of the rig air horn.

#### Kick While Drilling - Procedures And Responsibilities

#### Driller:

- 1. Stop the rotary and hoist the kelly above the rotary table:
- 2. Stop the mud pump(s).
- 3. Check for flow.
- 4. If flowing, sound the alarm immediately.
- 5. Ensure that all crew members fill their responsibilities to secure the well.
- Record drill pipe and casing shut-in pressures and pit volume increase and begin kill sheet.

#### Derrickman:

- Go to BOP/choke manifold area
- 2. Open choke line valve on BOP.
- 3. Signal to Floorman #1 that the choke line is open.
- 4. Close chokes after annular or pipe rams are closed.
- 5. Record shut-in casing pressure and pit volume increase.
- 6. Report readings and observations to Driller.
- 7. Verify actual mud weight in suction pit and report to Driller.
- 8. Be readily available as required for additional tasks.

#### Floorman # 1:

- 1. Go to accumulator control station and await signal from Derrickman.
- 2. Close annular preventer and HCR on signal (if available, if not then close pipe rams).
- 3. Record accumulator pressures and check for leaks in the BOP or accumulator system.
- 4. Report to Driller, and be readily available as required for additional tasks.

#### Floorman # 2:

- 1. Start water on motor exhausts.
- 2. Notify Contractor Tool Pusher or Rig Manager of well control situation.
- 3. Check location for ignition sources and extinguish or turn off, and stop any welding in progress.
- 4. Report to Driller, and be readily available as required for additional tasks.

#### Floorman # 3:

1. Stand-by with Driller, and be readily available as required for additional tasks.

#### Tool Pusher/Rig Manager:

- 1. Notify Oxy Representative and report to rig floor.
- 2. Review and verify all pertinent information.
- 3. Communicate information to Oxy Representative, and confer on an action plan.
- 4. Finalize well control worksheets, calculations and preparatory work for action plan.
- 5. Initiate and ensure the action plan is carried out.
- Communicate any changes in well or site conditions, or any indications that the action plan needs to be revised to the Oxy representative.

#### Oxy Representative:

 Notify Drilling Superintendent or Drilling Manager and RMT Leader or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

05/18/2009 რე რომისტებები რემან გარე გარე რემან მოატის ანცენ ააცენების და არების და Page 5 of 15

#### WELL CONTROL (continued)

#### Kick While Tripping - Procedures and Responsibilities

#### Driller:

- 1. Sound the alarm immediately when pipe displacement volume is less than 75% of calculated.
- 2. Position the upper tool joint just above rotary table and set slips.
- 3. Check for flow.
- 4. Ensure that all crew members fill their responsibilities to secure the well.
- 5. Record drill pipe and casing shut-in pressures and pit volume increase, and begin kill sheets.

#### <u>Derrickman:</u> (same as while drilling)

#### Floor Man # 1:

- 1. Install full opening valve (with help from Floorman #2) in top drill string connection.
- 2. Tighten valve with make up tongs.
- 3. Go to accumulator control station and await signal from Derrickman.
- 4. Close annular preventer and HCR valve on signal (if available, if not then close pipe rams).
- 5. Record accumulator pressures and check for leaks in the BOP and accumulator system.
- 6. Report to Driller, and be readily available as required for additional tasks.

#### Floor Man # 2:

- 1. Assist installing full opening valve in drill string.
- 2. Position back-up tongs for valve make-up.
- 3. Start water on motor exhausts.
- 4. Notify Contractor Tool Pusher or Rig Manager of well control situation.
- 5. Check location for ignition sources and extinguish or turn off, and stop any welding in progress.
- 6. Report to Driller, and be readily available as required for additional tasks.

#### Floorman # 3, Rig Manager/Tool Pusher, and Oxy Representative: (same as while drilling)

#### **H2S RELEASE**

The following procedures and responsibilities will be implemented on activation of the H2S siren and lights.

#### All Personnel

1. On alarm, don escape unit (if available) and report to upwind briefing area.

#### Rig Manager/Tool Pusher:

- 1. Check that all personnel are accounted for and their condition.
- 2. Administer or arrange for first aid treatment, and /or call EMTs as needed.
- 3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
- 4. Notify Contractor management and Oxy Representative.
- 5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

#### Two People Responsible For Shut-in and Rescue:

- 1. Don SCBA and acquire tools to secure well and perform rescue, i.e., wrenches, retrieval ropes, etc.
- 2. Utilize the buddy system to secure well and perform rescue(s).
- 3. Return to the briefing area and stand by for further instructions.

#### All Other Personnel:

1. Remain at the briefing area and await further instructions - do not leave unless instructed.

#### Oxy Representative:

- 1. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.
- 2. Notify Drilling Superintendent or Drilling Manager and RMT Leader or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

05/18/2009

#### PERSONAL INJURY OR DEATH

Call for assistance, and then administer first aid for the injured. Treatment should be prioritized by life-threatening conditions.

A. Do not move injured personnel unless they are in imminent danger. An ambulance should be summoned for any injury that appears to be serious.

#### FIRE OR EXPLOSION

#### Fire Fighting Philosophy

It is Oxy Permian's intent that Oxy and contract personnel will only extinguish incipient or beginning stage fires and perform or assist in initial non-threatening rescue operations. The responding fire department will be given primacy when they arrive to control a fire on any Oxy property. Any Oxy or contract employee who participates in a fire response must be fully trained and qualified as such, and must be utilizing appropriate Personal Protective Equipment.

#### Contract and Oxy Personnel Deployment

In the event of a fire or explosion all personnel will report to the safe briefing area. The Senior Contract Representative on site will designate personnel for rescue as appropriate depending on their qualifications and the risks of the rescue. Any rescue which involves significant risk to those performing the rescue should be deferred to professional response personnel.

No personnel will leave the area without direction / permission from the Senior Contract Representative on-site

The Senior Contract Representative on site will notify local emergency response personnel as required, along with the Contract Company management and the Oxy Representative as soon as reasonably possible.

#### **SPILLS**

In the event of a significant spill of any substance, the person discovering it should immediately notify the rig supervisor and the Oxy Representative. Personnel onsite should **NOT** attempt identification, control or containment unless they are absolutely sure of the product spilled, are fully aware of the hazard characteristics, and are equipped with the appropriate personal protective equipment.

#### HYDROCARBON VAPOR CLOUD RELEASE

Upon discovery of a Hydrocarbon Vapor Cloud (NGL) release, take immediate safety precautions to protect any company personnel or others that might be in the area. Other emergency actions should be initiated only by trained expert personnel from the appropriate pipeline company.

#### The following guidelines should be followed:

- 1. Immediately notify the rig supervisor and the Oxy Representative.
- 2. Determine wind direction, and evacuate upwind or at 90 degrees to the release.
- 3. Maintain a safe distance from the cloud.
- 4. Render first aid and call for an ambulance as necessary
- 5. Attempt to warn approaching individuals of the hazard.

05/18/2009

RO	RAC	TI	UD	EA	T

In the event of a bomb threat, the person receiving the call, on or off site, should try to get as much information as possible from the caller. The person receiving the call should immediately contact the supervisor in charge. Evacuation of the field should be considered at this time. Roadblocks may need to be installed. The supervisor in charge should make all appropriate contacts.

#### The Supervisor contacted should:

- a. Realize that every bomb threat is serious.
- b. Notify Corporate Security
- c. Inform Police/Sheriff's Department and Fire Department
- d. Contact RMT Leader or his designated relief to coordinate search efforts with the assistance of the local law enforcement agencies.

#### **BOMB THREAT CHECKLIST**

Date Name of pe	erson taking call	Phone # c	call came on
FILL OUT COMPLETELY	IMMEDIATELY AFTER BOI	MB THREAT	
<ol> <li>When is the bomb set to</li> <li>Where is the bomb local</li> <li>What does the bomb loc</li> <li>What type of bomb is it?</li> <li>What will cause the bom</li> <li>Did the caller place the to</li> <li>Why did the caller place</li> <li>What is the caller's name</li> </ol>	ted?  bk like?  b to explode?  comb?  the bomb?		
Callers: SexAgeRa	ceLength of call		
DESCRIPTION OF CALLE	R'S VOICE (Check all that	apply)	
CalmRapAngryCryiiExcitedNorrSlowDistiLoudSluri	ng Raspy nal Deep nct Ragged	LispAccentStutterDeepClearing Throat	_Disguised _Familiar? Who did it sound like? _Deep Breathing
BACKGROUND SOUNDS:			
Street	ises Machinery or Animals	Music Static PA System	Local Call _Long Distance Phone Booth
THREAT LANGUAGE:			
Well-SpokenFoul Message Read by Threa	· · · —	Irrational	_Taped
REMARKS:			

05/18/2009 - Page 8 of 15

#### NATURAL DISASTERS

#### **Tornadoes**

These general procedures should be followed by everyone seeking shelter from a severe storm or tornado:

#### Indoors:

- 1. Protect yourself from flying glass and debris.
- 2. Take refuge near the core of the building for maximum protection.
- 3. Do not smoke while taking shelter.
- 4... Shut all doors to offices, if time permits.

#### In the field:

- 1. Seek cover in a low-lying area, such as a culvert, ditch, pit, or water injection valve box.
- 2. Get out of and away from your vehicle.
- Stay away from power lines.
- 4. Cover your head with your arms and clothing.

#### Thunderstorms -

#### Indoors:

- Avoid water pipes, sinks, showers, tubs, etc.
- 2. Stay away from doors and windows.
- 3. Do not use the telephone.
- 4. Take off head sets.
- Turn off, unplug, and stay away from appliances, computers, power tools, & TV sets.

#### In the field:

- Avoid water.
- 2. Avoid high ground and open spaces.
- 3. Avoid all metal objects including electric wires, fences, machinery, motors, power tools, etc. <u>Unsafe places</u> include underneath canopies, small picnic or rain shelters, or near trees. Where possible, find shelter in a substantial building or in a fully enclosed metal vehicle such as a car, truck or a van with the windows completely shut. If lightning is striking nearby when you are outside, you should:
  - a. Crouch down, feet together, hands over ears
  - b. Avoid proximity (minimum of 15 ft.) to other people.
- 4. SUSPEND ACTIVITIES for 30 minutes after the last observed lightning or thunder.

#### **PUBLIC RELATIONS**

Oxy recognizes that the news media have a legitimate interest in incidents at Oxy facilities that could affect the public. It is to the company's benefit to cooperate with the news media when incidents occur because these media are our best liaison with the public.

Our objective is to see that all reports of any emergency are factual and represent the company's position fairly and accurately. Cooperation with news media representatives is the most reliable guarantee that this objective will be met.

All contract and Oxy employees are instructed <u>NOT</u> to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.

05/18/2009 Page 9 of 15

## Drilling Dept. Emergency Contact list

Drilling Manager

**Scott Cooper** 

713-366-5325 office

281-352-5865 cell

Drilling Superintendent Festus Hagan 713-366-5946 office

432-894-5352 cell

Drilling Eng. Supervisor Richard Jackson 713-215-7235 office 281-467-6383 cell

HES Specialist-Drilling Brian Bielss

432-685-5719 office

432-813-6335 cell

Drilling Coordinator

Drue Dunaway 432-685-5715 office

432-556-3288 cell

Drilling Coordinator Kevin Videtich 806-592-6213 office

806-891-2000 cell

### OXY Permian Incident Reporting Phone List

OXY Permian	Crisis Team	Hotline	Notification	

Person	Location	Office Phone	Cell/Mobile Phone
1 CI SON	Location	Office I floric	Centifodne i none
Asset Management-Operations Areas	,	,	
OXY Permian President & General Manager:			
Ken Dillon	Houston	(713) 366-5140	(661) 333-9315
Operations Support Manager: Rick Callahan	Houston	(713)-215-7578	(281) 389-1141
Asset Development Manager-Jeff Simmons	Houston	(713) 366-5124	(713) 560-8073
Public Affairs: Stacey Crews	Houston	(713) 366-5304	(713) 416-8381
<b>Operations South-Frontier</b>			
RMT Lead Frontier-Barry Beresik	Houston	(713) 366-5016	(713) 560-8061
RMT Lead South-Keith Brown	Houston	(713) 366-5354	(713) 264-1114
Surface Operations Team Lead-Bill Elliott	Midland	(432) 685-5845	(432) 557-6736
Well Operations Team Lead-Leamon Hood	Midland	(432) 685-5794	(432) 634-4486
Well Servicing Team Lead-Vicki Hollub	Houston	(713) 215-7332	(713) 885-6347
WST Coord Frontier-Kirk Hobbs	Midland	(432) 685-5951	(432) 634-3890
WST Coord South-Robert Ricks	Midland	(432) 685-5821	(432) 634-8791
NM Frontier Oper Coord -Larry Sammons	Ćarlsbad	(575) 887-8337	(575) 390-8397
NM-South Oper Coord-Gilbert Williams	Seminole	(432) 385-2778	(806) 215-0009
NM Frontier Oper Coord -Van Barton	Carlsbad	(575) 887-8337	
Completion Specialist-Dale Redding	Hobbs	(432) 385-3206	
HES Staff & Areas of First Contact Support			
HES Manager: John Kirby	Houston	(713) 366-5460	(281) 974-9523
Environmental Engineer, Air: Peggy Waisanen	Midland	(432) 685-5673	(432) 894-1968
* -	Midland		
Administrative Assistant: Judy Browning Environmental Consultant: Dennis Newman		(432) 685 5692	(432) 661 1048
,	Houston	(713) 366-5485 (713) 366-5932	(713) 560-8060 (713) 582-1848
Safety Engineer: Derek Purvis	Houston		1
Pipeline Safety: Don Bales	Midland	(432) 685-5844	(432) 894-1960
HES Lead-Pete Maciula	Midland	(432) 685-5667	(432) 557-2450
HES Specialist: Eddie Gonzales	Midland	(432) 685-5929	(432) 556-6790
HES Specialist-Drilling: Robert Lovelady	Midland	(432) 685-5630	(432) 813-6332
HES Tech & Area of Responsibility			
Wasson San Andres RMT: Mark Andersen	Denver City	(806) 592-6299	(806) 215-0077
Hobbs RMT: Steve Bishop	Hobbs	(575) 397-8251	(575) 390-4784
Frontier-New Mexico: Rick Kerby	Carlsbad	(575) 887-8337	(575) 631-4972
South-New Mexico-CJ Summers	Hobbs	(575) 397-8236	(575) 390-9228
Regulatory Affairs			
	- <del>,</del>		

(713) 935-7210

05/18/2009: Page 11 of 15...

er transporter and and and a variable of the second and a	The same of the sa	· · · · · · · · · · · · · · · · · · ·	
Regulatory Analyst-David Stewart	Midland	(432) 685-5717	- Carrier Mar 17, 1
Regulatory Analyst-Elizabeth Casbeer	Midland	(432) 685-5755	
Regulatory Analyst-Mark Stephens	Houston	(713) 366-5158	
DOT-Pipeline Response Numbers	re en		
N. Hobbs Unit: Steve Bishop	Hobbs	(575) 397-8251	(575) 390-4784
Wasson PMT: Todd King	Denver City	(806) 592-6274	(806) 215-0183
Bravo/Slaughter PMT: Gary Polk	Levelland	(806) 229-9708	(806) 638-2425
Cogdell RMT: Dean Peevy	Cogdell	(325) 573-7272	(325) 207-3367
Sharon Ridge: Carl Morales	Sharon Ridge	(325) 573-6341	(325) 207-3374
All DOT Pipeline Support: Donald Bales	Midland	(432) 685-5844	(432) 894-1960
The Maria Committee of the Committee of			
OOGC HES Contacts	, , ,	· ·	<u>, ' ,                                 </u>
Manager HES: Wes Scott	OOGC – Houston	(713) 215-7171	(713) 203-4050
Worldwide Safety Mgr: Greg Hardin alternate	OOGC – Houston	(713) 366-5324	(713) 560-8037
Worldwide Environ. Mgr: Ravi Ravishankar	OOGC – Houston	(713) 366-5039	(832) 863-2240
OOGC Risk Management		(210) 442 (520	(210) 510 2222
Jim Garrett	Los Angeles	(310) 443-6588	(310) 710-3233
Greg LaSalle, alternate	Los Angeles	(310) 443-6542	(310) 710-2255
OSI			
Workers Comp. Claim Manager: Steve Jones	Dallas	(972) 404-3542	
Workers Comp. Claims: Mark Ryan	Dallas	(972) 404-3974	2.5.
Auto Claims: Steve Jones	Dallas	(972) 404-3542	
Gallagher Bassett  Workers Comp. & Property Damage Claims-		(972) 728-3600	
OXY Permian Ltd.: Danny Ross		X252	(800) 349-8492
Axiom Medical Consulting	resident of the second of the		
Medical Case Management		(877) 502-9466	
OXY Permian Legal			
Tom Janiszewski	Houston	(713) 366-5529	(713) 560-8049
Human Resources			
H.R. Manager: Barbara Bernhard	Houston	(713) 215-7150	(713) 702-7949
H.R. Consultant: Amy Thompson	Houston	(713) 215-7863	(281) 799-7348
H.R. Consultant: Laura Matthews	Houston	(713) 366-5137	(713) 569-0386
H.R. Consultant: Jill Williams	Midland	(432) 685-5818	(432) 661-4581
Corporate Security			
Frank Zapalac	Houston	(713) 215-7157	(713) 829-5753
Hugh Moreno, alternate	Houston	(713) 215-7162	(713) 817-3322
Regulatory Agencies			
05/18/2009			Page 12 of 15

	,	· · · · · · · · · · · · · · · · · · ·	
Bureau of Land Management	Carisbad, Nivi	(575) 887-6544	of the second of the second of the second
Bureau of Land Management	Hobbs, NM	(575) 393-3612	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Bureau of Land Management	Roswell, NM	(575) 393-3612	
Bureau of Land Management	Santa Fe, NM	(505) 988-6030	*
DOT Juisdictional Pipelines-Incident Reporting New Mexico Public Regulation		(505) 827-3549	
Commission	Santa Fe, NM	(505) 490-2375	, , , , , , , , , , , , , , , , , , , ,
DOT Juisdictional Pipelines-Incident Reporting Texas Railroad Commission	Austin, TX	(512) 463-6788	
EPA Hot Line	Dallas, Texas	(214) 665-6444	
Federal OSHA, Area Office	Lubbock, Texas	(806) 472-7681	
National Response Center	Washington, D. C.	(800) 424-8802	-
National Infrastructure Coordinator Center		(202) 282-9201	
New Mexico Air Quality Bureau	Santa Fe, NM	(505) 827-1494	
New Mexico Oil Conservation Division	Artesia, NM	(575).748-1283	
New Mexico Oil Conservation Division	Hobbs, NM	(575) 393-6161	
New Mexico Oil Conservation Division	Santa Fe, NM	(505) 471-1068	
New Mexico OCD Environmental Bureau	Santa Fe, NM	(505) 827-7152 (505) 476-3470	
New Mexico Environmental Department	Hobbs, NM	(575) 827-9329	
NM State Emergency Response Center	Santa Fe, NM	(505) 827-9222	
Railroad Commission of TX	District 8, 8A Midland, TX	(432) 684-5581	
Texas Emergency Response Center	Austin, TX	(512) 463-7727	
TCEQ Air	Region 2 Lubbock, TX	(806) 796-3494	
TCEQ Water/Waste/Air	Region 7 Midland, TX	(432) 570-1359	

## Medical Facilities

	T	T
Artesia General Hospital	Artesia, NM	(575) 748-3333
Guadalupe Medical Center	Carlsbad, NM	(575) 887-6633
Lea Regional Hospital	Hobbs, NM	(575) 492-5000
Medical Arts Hospital	Lamesa, TX	(806) 872-2183
Medical Center Hospital	Odessa, TX	(432) 640-4000
Memorial Hospital	Seminole, TX	(432) 758-5811
Midland Memorial Hospital	Midland, TX	(432) 685-1111
Nor-Lea General Hospital	Lovington, NM	(575) 396-6611
Odessa Regional Hospital	Odessa, TX	(432) 334-8200
St. Mary's Hospital	Lubbock, TX	(806) 796-6000
Union County General Hospital	Clayton, NM	(575) 374-2585
University Medical Center	Lubbock, TX	(806) 743-3111

Local Emergency Planning Comm.

Richard H. Dolgener	Andrews County, TX	(432) 524-1401	
Joel Arnwine	Eddy County, NM	(575) 887-9511	
County Judge Judy House	Gaines County, TX	(432) 758-5411	
Myra Sande	Harding County, NM	(575) 673-2231	4 1
Jerry Reynolds	Lea County, NM	(575) 396-8600	(575) 399-2376

Royce Creager	Loving County, TX	(432°) 377-2231	billiage a summania property of marine sugar
Mike Cherry	Quay County, NM	(575) 461-2476	
Della Wetsel	Union County, NM	(575) 374-8896	S
Bonnie Leck	Winkler County, TX	(432) 586-6658	
Carl Whitaker	Yoakum County, TX	(806) 456-7491	
	· · · · · · · · · · · · · · · · · · ·	,	
Law Enforcement - Sheriff		T	
Andrews Cty Sheriff's Department	Andrews County	(432) 523-5545	
Eddy Cty Sheriff's Department	Eddy County (Artesia)	(575) 746-2704	
Eddy Cty Sheriff's Department	Eddy County (Carlsbad)	(575) 887-7551	
Gaines Cty Sheriff's Department	Gaines County (Seminole)	(432) 758-9871	
Lea Cty Sheriff's Department	Lea County (Eunice)	(575) 384-2020	
Lea Cty Sheriff's Department	Lea County (Hobbs)	(575) 393-2515	,
Lea Cty Sheriff's Department	Lea County (Lovington)	(575) 396-3611	
Union Cty Sheriff's Department	Union County (Clayton)	(505) 374-2583	, ,
Yoakum City Sheriff's Department	Yoakum Co.	(806) 456-2377	
		•	•
Law Enforcement - Police			, ,
Andrews City Police	Andrews, TX	(432) 523-5675	
Artesia City Police	Artesia, NM	(575) 746-2704	
Carlsbad City Police	Carlsbad, NM	(575) 885-2111	3 /
Clayton City Police	Clayton, NM	(575) 374-2504	
Denver City Police	Denver City, TX	(806) 592-3516	7.
Eunice City Police	Eunice, NM	(575) 394-2112	
Hobbs City Police	Hobbs, NM	(575) 397-9265 (575) 393-2677	
Jal City Police	Jal, NM	(575) 395-2501	
Lovington City Police	Lovington, NM	(575) 396-2811	
Seminole City Police	Seminole, TX	(432) 758-9871	1
The state of the s	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(132) 130 3011	
Law Enforcement - FBI		<u> </u>	
FBI ***	Alburqueque, NM	(505) 224-2000	1.0
FBI	Midland, TX	(432) 570-0255	1
		,	
Law Enforcement - DPS			· · · · · · · · · · · · · · · · · · ·
NM State Police	Artesia, NM	(575) 746-2704	
NM State Police	Carlsbad, NM	(575) 885-3137	,
NM State Police	Eunice, NM	(575) 392-5588	
NM State Police	Hobbs, NM	(575) 392-5588	
NM State Police	Clayton, NM	(575) 374-2473; 911	
TX Dept of Public Safety	Andrews, TX	6 (432) 524-1443	14 1 1 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
TX Dept of Public Safety	Seminole, TX	(432) 758-4041	
TX Dept of Public Safety	Yoakum County TX	(806) 456-2377	they're they
		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	· · · · · · · · · · · · · · · · · · ·
Firefighting & Rescue			

05/18/2009 Page 14 of 15

Server of the se	The say of the same and the sam	(432) 523-4820	Canada and an and a second and assert a second
Andrews	Andrews, TX	(432) 523-3111	
Artesia	Artesia, NM	(575) 746-5051	
Carlsbad	Carlsbad, NM	(575) 885-3125	
Clayton	Clayton, NM	(575) 374-2435	
Denver City	Denver City, TX	(806) 592-5426	
Eunice	Eunice, NM	(575) 394-2111	
Hobbs	Hobbs, NM	(575) 397-9308	
Jal	Jal, NM	(575) 395-2221	
Kermit	Kermit, TX	(432) 586-3468	
Lovington	Lovington, NM	(575) 396-2359	
Maljamar	Maljamar, NM	(575) 676-4100	
Monahans	Monahans, TX	(432) 943-4343	, ,
Nara Visa	Nara Visa, NM	(575) 461-3300	· ·
Pecos	Pecos, TX	(432) 445-2421	· ·
		(432) 758-3676	
Seminole	Seminole, TX	(432) 758-9871	

#### Ambulance

Amistad/Rosebud	Amistad/Rosebud, NM	(575) 633-9113	
Andrews Ambulance	Andrews, TX	(432) 523-5675	
Artesia Ambulance	Artesia, NM	. (575) 746-2701	
Carlsbad Ambulance	Carlsbad, NM	(575) 885-2111; 911	
Clayton, NM.	Clayton, NM	(575) 374-2501	
Denver City Ambulance	Denver City, TX	(806) 592-3516	
Eunice Ambulance	Eunice, NM	(575) 394-3258	
Hobbs, NM	Hobbs, NM	(575) 397-9308	
Jal, NM	Jal, NM	(575) 395-2501	
Lovington Ambulance	Lovington, NM	(575) 396-2811	
Nara Visa, NM	Nara Visa, NM	(575) 461-3300	
Pecos Ambulance	Pecos, TX	(432) 445-4444	
Seminole Ambulance	Seminole, TX	(432) 758-8816 (432) 758-9871	

## Medical Air Ambulance Service

AEROCARE - Methodist Hospital	Lubbock, TX	(800) 627-2376	
San Angelo Med-Vac Air Ambulance	San Angelo, TX	(800) 277-4354	1 2
Southwest Air Ambulance Service	Stanford, TX	(800) 242-6199	
Southwest MediVac	Snyder, TX	(800) 242-6199	
Southwest MediVac	Hobbs, NM	(800) 242-6199	
Odessa Care Star	Odessa, TX	(888) 624-3571	
NWTH Medivac	Amarillo, TX	(800) 692-1331	

05/18/2009 🚉 💯 🐪 🐪 🐪 🐪 🐪 🚉 🧎 🚉 🚉 🚉 💮 💮 🐧 🚉 💮 Page 15 of 15

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
NM0281482A
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
OXY USA Inc.
NM0281482A
Mobile Federal # 9
1980' FNL & 1650' FEL
Same
Section 29, T. 23 S., R 31 E., NMPM
Eddy County, New Mexico

## TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions	
Permit Expiration	
Archaeology, Paleontology, and Historical Sites	
Noxious Weeds	
Special Requirements	
Lesser Prairie Chicken	
Ground Level Abandoned Hole Marker	
ROW is required for access road, and Surface pipelin	ne
Construction	
Notification	
Topsoil	4
Closed Loop System	
Federal Mineral Material Pits	
Well Pads	
Roads	
Road Section Diagram	
□ Drilling	,
R-111-P Potash	
Logging requirements	
≥ Production (Post Drilling)	
Well Structures & Facilities	
Pipelines	
Electric Lines	
Reseeding Procedure/Interim Reclamation	
Final Abandonment/Reclamation	

#### I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

#### II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

### III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

#### IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## V. SPECIAL REQUIREMENT(S)

#### Lesser Prairie Chicken and Well Markers

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

#### **ROW**

A ROW must be sent in for the access road, and surface pipeline to be approved.

#### VI. CONSTRUCTION

#### A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

#### B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

#### C. Closed Loop System

Although this is a closed loop system and no reserve pits will be utilized, the v-door will be on the east side of the location.

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

#### F. ON LEASE ACCESS ROADS

#### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

#### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

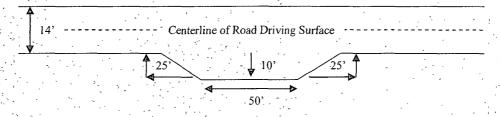
#### Ditching

Ditching shall be required on both sides of the road.

#### **Turnouts**

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

#### Standard Turnout - Plan View

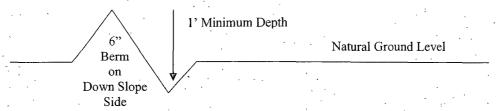


#### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

#### Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

#### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 
$$\frac{400'}{4\%} + 100' = 200'$$
 lead-off ditch interval

#### **Culvert Installations**

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

#### Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

## Fence Requirement

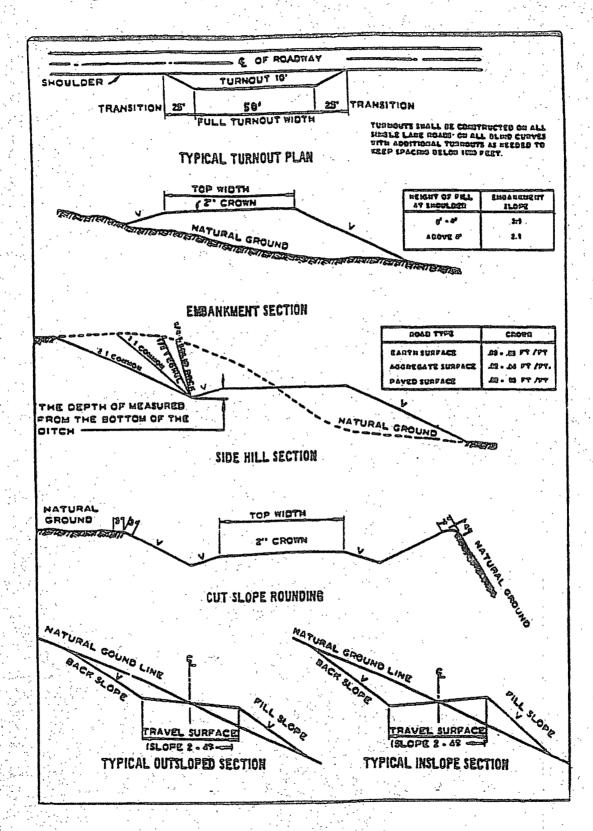
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

#### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



#### VII. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- Setting and/or Cementing of all casing strings
- c. BOPE tests

## **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. The Rustler top and top and bottom of Salt is to be recorded on the Completion Report.

#### B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

#### R-111-P Potash

Possible lost circulation in the Delaware and Bone Spring formations.

Possible water flows in the Salado, Castile, Delaware and Bone Spring formations.

- 1. The 11-3/4 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If the salt is encountered at a shallower depth, the casing is to be set a minimum of 25 feet above the salt.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:

  The intermediate should be set at approximately 4000 feet in the Fletcher

  Anhydrite or Lamar Limestone.
  - ⊠ Cement to surface. If cement does not circulate see B.1.a, c-d above.

     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash concerns.

The DV tool should be placed a minimum of 50 feet below the intermediate casing shoe.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - a. First stage to DV tool, cement shall:
  - Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
  - b. Second stage above DV tool, cement shall:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of 3" flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends.
- 3: Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.

  Operator is using a 5M system but testing as a 3M.
- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.

#### D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

RGH 081909

## VIII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color Shale Green, Munsell Soil Color Chart # 5Y 4/2

#### B. PIPELINES

#### STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing.
  - (2) Earth-disturbing and earth-moving work.
  - (3) Blasting.
  - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder

- 9. The pipeline shall be buried with a minimum of <u>24</u> inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

#### C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.
- 6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

## 11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.
- See attached reclamation plans.

## IX. INTERIM RECLAMATION & RESEEDING PROCEDURE A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

#### B. RESEEDING PROCEDURE

Once the well is drilled, all completion procedures accomplished, and all trash removed, reseed the location and all surrounding disturbed areas as follows:

#### Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

	Species	<u>lb/acre</u>	. , .	**
	Plains Bri	stlegrass		5lbs/A
*	Sand Blue	<b>–</b>		5lbs/A
	Little Blue	estem		3lbs/A
	Big Blues	, ,		6lbs/A
	Plains Con	reopsis	, .	2lbs/A
	Sand Drop	oseed ,	,	1lbs/A
F ##		•	,	

<sup>\*\*</sup>Four-winged Saltbush

Pounds of seed x percent purity x percent germination = pounds pure live seed
(Insert Seed Mixture Here)

<sup>5</sup>lbs/A

<sup>\*</sup> This can be used around well pads and other areas where caliche cannot be removed.

<sup>\*</sup>Pounds of pure live seed:

## X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.