Form 3160-3 (August 1999)

DEPARTMENT OF THE INTERIO OCD-ARTESIA ·· BUREAU OF LAND MANAGEMENT

ATS-10-567 FORM APPROVED 10-1012 OMB NO. 1004-0136

Expires: November 30, 2000

	APPLICATION FOR PERMIT TO DRILL OR REENTER					5. Lease Serial No. NMNM86024		
1a. Type of Work	X DRILL	REENTI	ER	R-111-POTAS	6.	If Indian, Allotee or	Tribe Name	
1b. Type of Well	X Oil Well Gas Well	Other	X s	Single Zone Multiple Zone		Unit or CA Agreeme	ent Name and No.	
2. Name of Operator	r				-	Lease Name and We	all No. 3280	
OXY USA Inc.				16696		Cypress 28 Fe	* ' '	
3a. Address				3b. Phone No. (include area coo	de) 9.	API Well No.	2 0 -	
P.O. Box 5025	<u>60 Midland, TX 79710-</u>	0250		432-685-5717		<u>30-015- 38</u>	1287	
43	(Report location clearly and in ac 5 60' 5 FNL 380 FWL NWNW(D)	cordance with any St	ate eq	uirements)*	İ	Field and Pool, or E Laguna Salado Sec., T., R., M., or I	xploratory Done Spring, S Blk. and Survey or Area	
At proposed prod.	zone 660 FNL 170	O FEL NWNE(B))			Sec 28 T23S	R29F	
14. Distance in miles a	and direction from nearest town or	post office*			12.	County or Parish	13. State	
	6 miles no	rtheast from	lovi	na. NM	Fd	dy	NM	
15. Distance from pro			_	.No. of Acres in lease		ng Unit dedicated to		
location to neares property or lease (Also to nearest d)'		480		120		
18. Distance from pro			10	. Proposed Depth	'20 PI M	BIA Bond No. on f	ila	
	rilling, completed,		19	110751 7784	20. BLW	BIA BOIRD NO. OIL	110	
applied for, on the	is lease, ft.		1	1062 3'M 7 775'∀		ES013	6	
21. Elevations (Show	whether DF, KDB, RT, GL, etc.		22	2. Approximate date work will star	rt*	23. Estimated dura	ition	
3020.5' GI	<u>L</u>			9/1/10			45	
		2	24. A	ttachments			£ /	
 A Drilling Plan A Surface Use Pl 	d by a registered surveyor. lan (if the location is on National F led with the appropriate Forest Ser	•	the	 4. Bond to cover the operation of the second of t		·		
25 61			N.			Date		
25. Signuature				(Printed/Typed)		Date	_1 1 _	
	n'SH		Dav	id Stewart			5(12/10	
Title								
Sr. Regulat	tory Analyst							
Approved by (Signau			Name	(Printed/Typed)		Date-	T 2 7 2010	
	/s/ Linda S.C. Runde	elle lle		/s/ Linda S.C. Rund	dell	05	1 2 1 2010	
Title STA	TE DIRECTOR)	Office	nm stat	e of	FICE	-	
Application approval	does not warrant or certify that the	ne applicant holds les	al or	equitable title to those rights in t	he subject	lease which would	entitle the applicant to	
conduct operations th			,			VAL FOR TW		
	on 1001 and Title 43 U.S.C. Sectee, fictitious or fraudulent statemen			for any person knowlingly and				
*(Instructions on Rev	erse)	ГБ		CEIVED				
					1/-	. , /. /	<i>a</i>)	
Carlsbad (Controlled Water Basin		NO	V 09 2010	KÐ	11/20/10	<i>y</i>	
		NN	100	DD ARTESIA				

SEE ATTACHED FOR CONDITIONS OF APPROVAL Approval Subject to General Requirements & Special Stipulations Attached

District 1

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brozos Rd., Aztec, NM 87410

16696

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

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

3029.9°

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Name Pool Code Salado Bone Sprine 96857 30-015-Property Code Properly Nome Well Number 3HCYPRESS 28 FED. 37.803 Elevation OGRID No. Operator Name

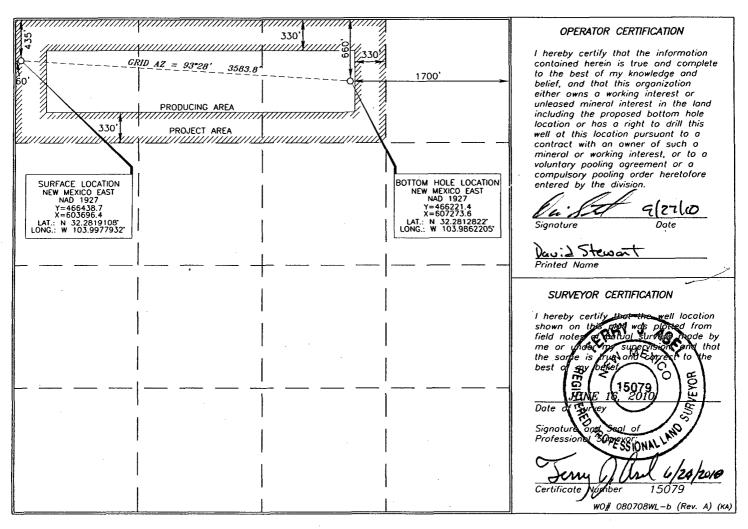
Surface Location

OXY USA, INC.

UL or lot no.	Section	township	Kange	Lot ion	reet from the	North/South line	reet from the	Lost/ west line	County
D	28	23 SOUTH	29 EAST, N.M.P.M.		<i>43</i> 5'	NORTH	60'	WEST	EDDY
Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
R	28	23 SOUTH	20 FAST NMPM		660'	NORTH	1200'	EAST	EDDY

Dedicated Acres Joint or Infill Consolidation Code Order No. 120

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the



Form 3160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR OCD-ARTESIA BUREAU OF LAND MANAGEMENT

1-10-10-541
R-JIM APPREASH
OMB NO. 1004-0135

5. Lease Serial No.

Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an

NMNM86024 6. If Indian, Allottee or Tribe Name

	m 3160-3 (APD) for such p			
SUBMIT IN TRIPLICATE -	Other instructions on re	verse side	7. If	Unit or CA/Agreement, Name and/or No
1. Type of Well X Oil Well Gas Well Other 2. Name of Operator OXY USA Inc.		16696	Cypr	rell Name and No. ress 28 Federal #3H
3a. Address P.O. Box 50250, Midland, TX 79710-		none No. (<i>include area</i> 432-685-57.17	code) 30-0	PI Well No. 15- Tield and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey of SL - 435 FNL 60 FWL NWNW(D) Sec 2 PBHL-660 FNL 1700 FEL NWNE(B) Sec	Description) 28 T23S R29E (U/L	b)	Lagu	na Salado Bone Spring S
12. CHECK APPROPRIATE	BOX(ES) TO INDICATE	E NATURE OF NO	OTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE	OF ACTION	
X Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair X Change Plans	Deepen Fracture Treat New Construction Plug and Abandon	Production (Start/R Reclamation Recomplete Temporarily Abane	Well Integrity Other Move
That roundomness round	Convert to Injection	Plug Back	Water Disposal	Our race Location
If the proposal is to deepen directionally or recomp Attach the Bond under which the work will be per following completion of the involved operations. testing has been completed. Final Abandonment I determined that the final site is ready for final insp. **Location** becomes **At the request of the BLM, OXY US filed 5/12/10.** Original Surface Location - 735 F. New Surface Location - 435 FNL 60 PBHL - 660 FNL 1700 FEL NWNE(B) Attachments - Amended Drilling Pl	rformed or provide the Bond No If the operation results in a multi Notices shall be filed only after ection.) Of the dox @ To SA Inc. moved the surf FNL 330 FWL NWNW(D) OF FWL NWNW(D)	on file with BLM/Biple completion or recall requirements, included the second of the s	A. Required subseque ompletion in a new into ding reclamation, have the ding reclamation of the ding r	ent reports shall be filed within 30 days erval, a Form 3160-4 shall be filed once e been completed, and the operator has The APD was originally
tur Parried mar 10	15/10	 .	E ATTACH ONDITIONS	ED FOR OF APPROVAL
14. I hereby certify that the foregoing is true and correct	<i>13/10</i>	itle	`	
Name (<i>Printed/Typed</i>) David Stewart			ulatory Analyst	
lu' Stat	a	Date 4(2-	ul 10	
THIS	S SPACE FOR FEDERAL	OR STATE OFFI	CE USE	
Approved by /s/ Linda S.C. F Conditions of approval, if any, are attached. Approval	of this notice does not warrant o	Office.	DIRECTOR	Date OCT 2 7 2010
certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations t	those rights in the subject lease	е	nki stat	e office

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 28 TWP. 23-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 435' FNL & 60' FWL

ELEVATION 3029.9'

OPERATOR OXY USA, INC.

LEASE CYPRESS 28 FED. #3H

U.S.G.S. TOPOGRAPHIC MAP

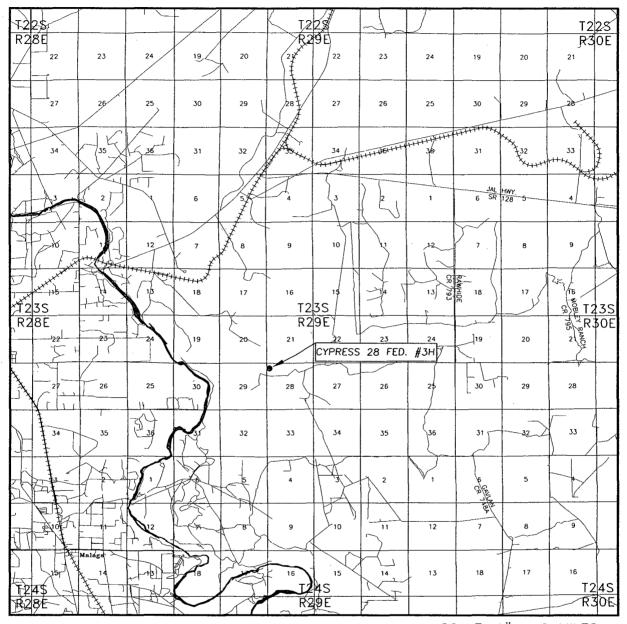
REMUDA BASIN, N.M.

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 575-393-9146



VICINITY MAP



SEC. <u>28</u> TWP. <u>23-S</u> RGE. <u>29-E</u>

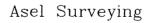
SURVEY N.M.P.M.
COUNTY EDDY

DESCRIPTION 435' FNL & 60' FWL

ELEVATION 3029.9'
OPERATOR OXY USA, INC.

LEASE CYPRESS 28 FED. #3H

SCALE: 1" = 2 MILES

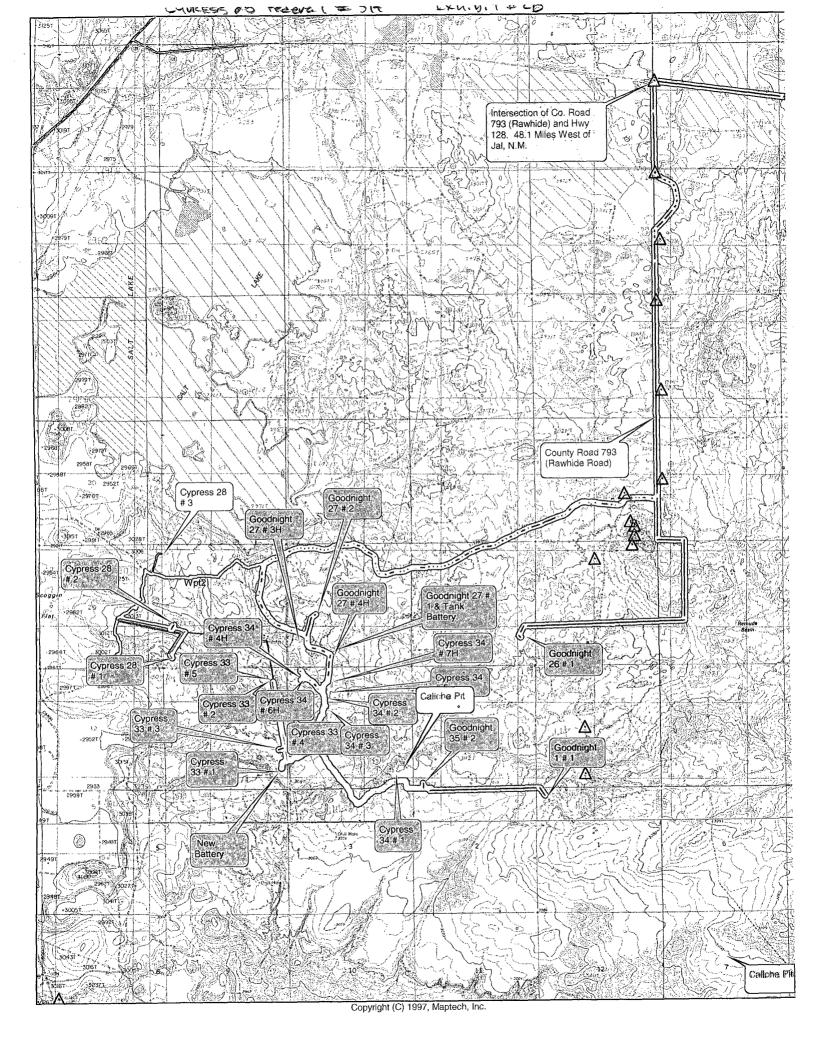


P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 575-393-9146

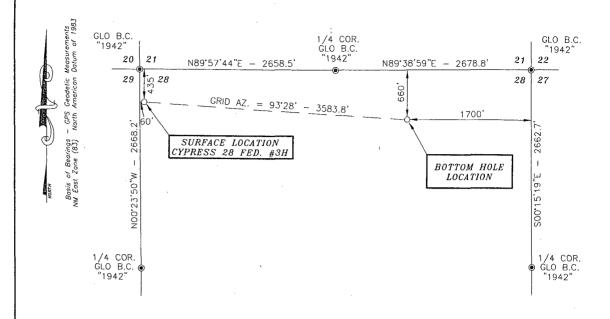


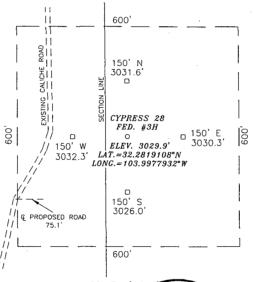
DIRECTIONS BEGINNING IN JAL AT THE INTERSECTION OF HWY. #128 AND HWY. #18, GO WEST ON HWY. #128 FOR APPX. 48.1 MILES, TURN SOUTH ON EDDY CO. ROAD #793 (RAWHIDE ROAD) FOR 3.5 MILES, TURN WEST ON LEASE ROAD FOR 4.5 MILES, TURN NORTH FOR 0.2 MILES, TURN EAST ON PROPOSED ROAD FOR 75.1 FEET TO LOCATION.





SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY NEW MEXICO





DRIVING DIRECTIONS: BEGINNING IN JAL AT THE INTERSECTION OF HWY. #128 AND HWY. #18, GO WEST ON HWY. #128 FOR APPX. 48.1 MILES, TURN SOUTH ON EDDY CO. ROAD #793 (RAWHIDE ROAD) FOR 3.5 MILES, TURN WEST ON LEASE ROAD FOR 4.5 MILES, TURN NORTH FOR 0.2 MILES, TURN EAST ON PROPOSED ROAD FOR 75.1 FEET TO LOCATION.

SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEGGE AND BELIEF, AND MEETS THE "MINIMIUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

Serry J. Asel N.M. R.P.S. No. 15079

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 575-393-9146



DENOTES FOUND MONUMENT AS NOTED

OXY USA WTP LP

CYPRESS 28 FED. #3H AT
435' FNL & 60' FWL IN SECTION 28,
TOWNSHIP 23 SOUTH, RANGE 29 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 06/16/10	Sheet 1 o	1 Sheets
W.O. Number: 080708WL-b (Rev. A)	Drawn By: KA	Rev: A
Date: 06/17/10	080708WL-b	Scale:1"=1000

Exhibit #10 SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY NEW MEXICO GLO B.C. 1942 20 21 28 29 Geodetic . American OXY USA, INC. CYPRESS 28 FED. #3H North A N11'58'03"E of Bearings Zone (83) 7+71.2 END SURVEY @
OXY USA, INC.
CYPRESS 28 FED. #3H
NAD 27 LAT. = 32'16'53.20"N
LONG. = 103'59'54.73"W
6±96.1 P.I. 78'01'01" RT.
5+01.7 P.I. 04'05'27" LT.
0+00.0 BEGIN SURVEY @
EVERTIME 70' CALICULE LEG 2668. EXISTING 30' CALICHE LEASE ROAD LAT. = 32'16'46.56"N S00'23' NAD 27 LONG. $\approx 103'59'57.71"W$ LANDOWNER U.S.A. GLO 1/4 B.C. "1942" **DESCRIPTION** A STRIP OF LAND 30.0 FEET WIDE AND 771.2 FEET OR 0.146 MILES IN LENGTH CROSSING U.S.A. LAND IN SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY. MEXIC 15079 LEGEND - DENOTES FOUND MONUMENT AS NOTED SURVEYORS CERTIFICATE I, TERRY J. ASEL, NEW MEXICO PROFESSIONAD SURVEYOR.
NO. 15079, DO HEREBY CERTIFY THAT I CONSUCTSO IND SURVEY STRESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY STRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMIUM STANDARDS FOR SURVEYING IN NEW MEXICOS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS. 500' SCALE: 1"=500' USA, OXY SURVEY FOR A ROAD EASEMENT CROSSING U.S.A. LAND IN SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

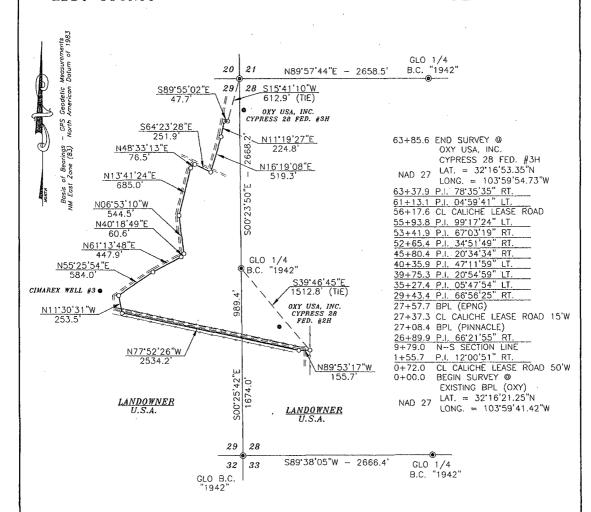
N.M. R.P.S. No. 15079

Asel Surveying

P.O. BOX 393 - 310 W, TAYLOR HOBBS, NEW MEXICO - 575-393-9146

Survey Date: 06/16/10	Sheet 1 of 1 Sheets
W.O. Number: 100616RD	Drawn By: KA
Date: 06/17/10	100616RD.DWG Scale:1"=500'

23 SOUTH, RANGE 29 EAST, N.M.P.M., **SECTIONS 28 & 29,** EDDY COUNTY NEW MEXICO



DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE AND 6385.6 FEET OR 1.209 MILES IN LENGTH CROSSING U.S.A. LAND IN SECTIONS 28 & 29, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.



SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR
NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM
RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS
TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND
BELIEF, AND MEETS THE "MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO* AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.



Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 575-393-9146

LEGEND

DENOTES FOUND MONUMENT AS NOTED

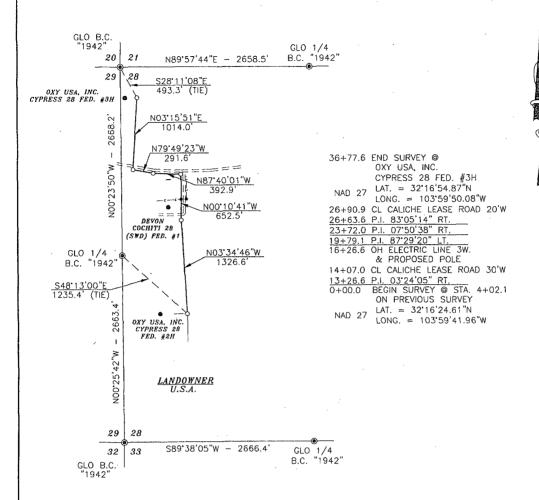
1000' 2000' FEET 1000' SCALE: 1"=1000

USA

SURVEY FOR A PIPELINE EASEMENT CROSSING U.S.A. LAND IN SECTIONS 28 & 29, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 06/16/10	Sheet 1 of 1 Sheets
W.O. Number: 100323PL (Rev. A)	Drawn By: KA
Date: 06/18/10	100323PL (Rev. A).DWG Scale:1"=1000

SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY NEW MEXICO



DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE AND 3677.6 FEET OR 0.697 MILES IN LENGTH CROSSING U.S.A. LAND IN SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.



SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMIUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

Jenn Jarl 6/24/2010 Terry J. Asel N.M. R.P.S. No. 15079

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 575-393-9146

<u>LEGEND</u>

DENOTES FOUND MONUMENT AS NOTED

ements of 1983

Measure Datum

- CPS North

> 7ings (83)

Basis o NM East

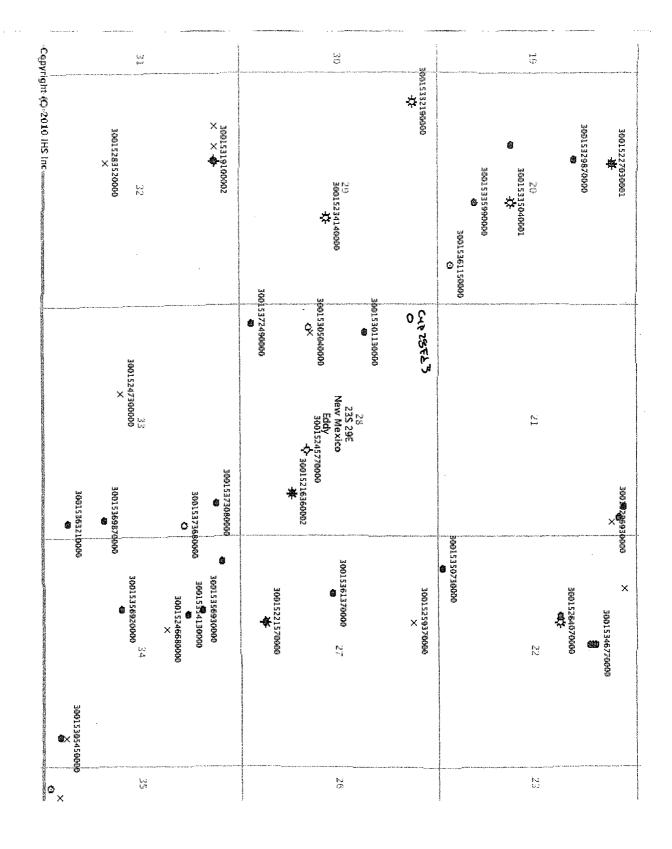
1000' 0 1000' 2000' FEET

SCALE: 1"=1000'

OXY USA, INC.

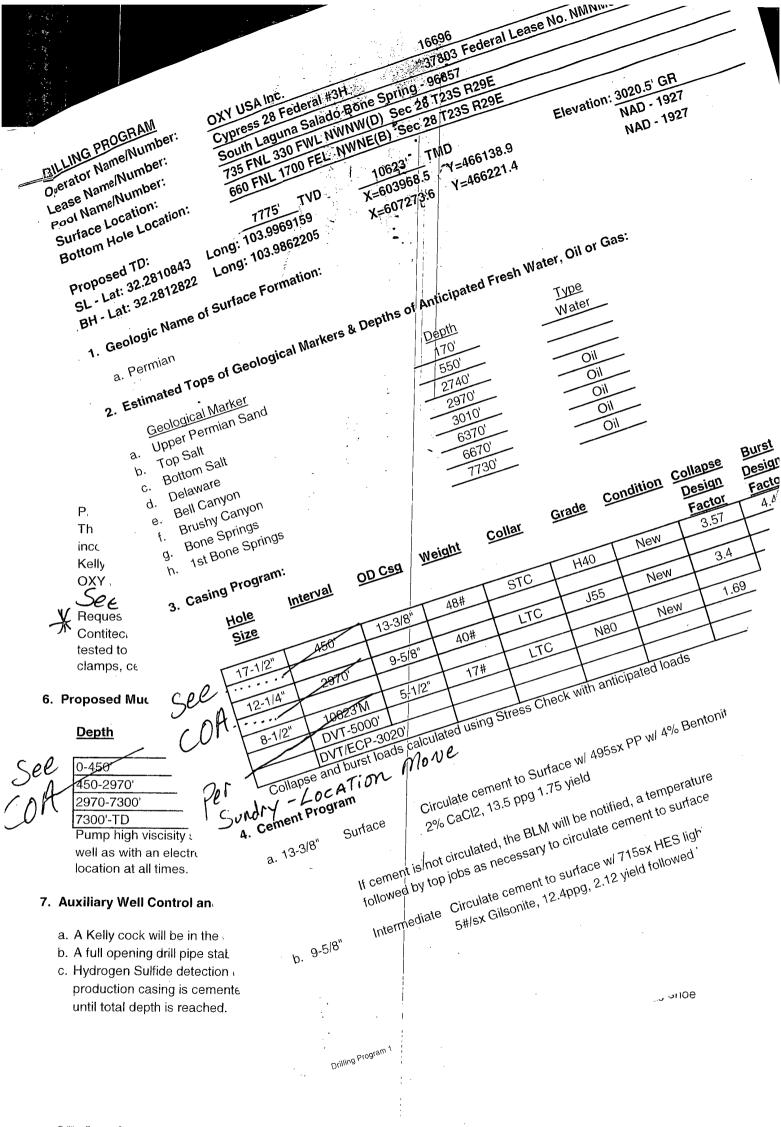
SURVEY FOR AN ELECTRIC LINE EASEMENT CROSSING U.S.A. LAND IN SECTION 28, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Dote: 06/16/10	Sheet	1 0	f 1	Sheets
W.O. Number; 100323EL-b (Rev. A)	Drawn E	∃y: KA		
Date: 06/17/10	100323EL~6	(Rev. A).DWG	Scale:1	"=1000"



Attachment C-103 – Amended APD OXY USA Inc.
Cypress 28 Federal #3H
SL-435 FNL 60 FWL NWNW(D) Sec 28 T23S R29E
BHL-660 FNL 1700 FEL NWNE(B) Sec 28 T23S R29E
Eddy County, NM

- 1. Directions From Jal go west on SH 128 for 48.1 miles. Turn south on CR 793 (Rawhide Road) for 3.5 miles. Turn west on lease road for 4.5 miles, turn north for 0.2 miles, turn east on proposed road for 75 feet to location.
- 2. Blade and water existing road from CR 793 (Rawhide Road) to location and repair any bad areas of the existing road with caliche.
- **3.** Caliche for location and road will come from a caliche pit located in Sec 34 T23S R29E, Eddy County, NM.
- **4.** See attached for the proposed Well Site Layout, proposed facilities, road, flow line, and electric line, Exhibits #1A, 1B, 1C, 1D, 1E.
- **5.** See attached for vicinity and access route to the proposed location, Exhibits #2A, #2B, #2C, #2D.
- 6. One mile AOR map, see attached for Exhibit #3A, 3B
- 7. Schematic and description of BOP with required valves and choke lines, expanded view of flex hose routing and clamp location, see attached for Exhibit #4A, 4B, 4C, 4D.



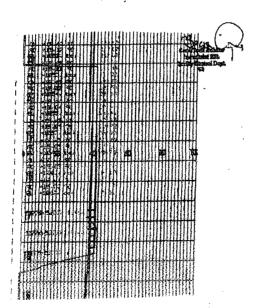


Full Technology

Quality Documen

QUA INSPECTION	LITY CONT AND TEST		CATE		T. NT:	7 46	
PURCHASER:	Phoenix Bea	édia Co.		P.O.	Nº:	002491	
CONTRECH CROSS HT:	412638	HOSE TYPE	3"	6	Choice an	d Kill Hoes	
HORE BEREAL IF:	52777	NOMENAL / AC	TUALL	ENOTH	10,67	'm	
W.P. 68,98 kPs	10 000 psi	T.P. 103,4	ЫР€	15000	at Dureste	r 50 -	mir
Pressure test with woter of annothers terrorisate terr							
→ 10 nms 25 pc	Pe	COLP	HA/DIE				
Type	s	ertsi N°		Quello (——Т	Heat N	
3° coupling with	917	913	+	AIEI 4130		T7998A	
4 1/16" Fishga and				AISI 4130		28984	
NFOCHIP INSTALLED API Spec 16 C Temperature rate: "B"							
CERTIFY THAT THE ABOVE HOSE HAD BEEN IMABURACTURED IN ACCOMPANCE WITH THE TRICES OF THE ORDER AND BESIEVE TESTED AS ABOVE WITH EATBEACTORY REQULT.							
As:	lumberates.		Charles (Control	*************		
	}	-		~~~	Marin Kulif		- 1

Pege: 1/



- PHOENIX Beattle

Delivery Note

Customer Order Humber	374-369-601	Delivery Note Number	953078	Proje	1
Customer / Invoice Addres HEMERICH & PAYNE INT'L D 1627 SOUTH BOLLOCK TULSAL OK 74119		Delivery / Address HELMERICH & PAYNS IOC ATTH: JOE STEPHENSON - RE 13699 INDUSTRIAL ROAD HOUSTRIAL ROAD 17015	G 370	ang ang paggarang	

l	Constorner Acc No	Phoenix Sentile Contract Manager	Phoesis Bootife Reference	25/23/2006

itum Kie	Seettle Part Number / Description	Orty Ordsred	Oty Sent	Oty To FoSour
***	INFLOCISA-36-4F1 3° 108 INC CAR HISE X 36°C CAL CM 4.1716* APT SPEC FLANSE E/ End 1: 4.1716* 100gst APT Spec 6A Type 68X Flange End 2: 4.1716* 100gst APT Spec 6A Type 68X Flange C/W 8155 Standard ring groove at each and Suttable for 16% Service identing pressure: 10,600pst Test pressure: 15,000pst Standard: APT 18C PATT Spectification Aroun Searching: Included Fire Ruting: Not Included Fire Ruting: Not Included Fire Ruting: Not Included	,	1	đ
	ESEXS-IPF3 LIFTING & SAFETY EQUIPMENT TO SUIT HPLOCKS-36-F1 2 x 100ms 10 Safety Cleaps 2 x 240ms 10 Lifting Collars & bleenth C's 2 x 240ms 10 Lifting Collars & bleenth C's 4 x 77t Stainfess Steel wire rope 3/4" 00 4 x 7.76t Sheckles		1	0
- ;	SC725-2065 SAFETY OUMP 200M 7.25T C/S GALVANISED	1	1	0

-- PHOENIX Beattle

Delivery Note

Custorser / Invicios Addraces HELPERCH & PAYNE INT'L ORILLING CO HATE SOUTH DOULDER HELPERCH & PAYNE INC HASA, OK 1369 TROUSTRIM, RAM HOUSTRIM, TR	Customer Order Mumber	270-369-001	Dallwary #	ota Humbar		003478	Page	ž
77015	HELMERICH & PAYNE INT'L OR 1437 SOUTH BOULDER TULSA, OK		HELMERICH ATTN: JOE 13609 THE	i a páyré toc stephenson - estrual road	RIS 376			

Customer Aco No	Phoenix Beattle Contract Manager	Phoenix Bestilo Reference	Deta
101	J3I,	70 6533	05/23/2006

torn No	Beetlis Part Number / Description	Ordered	City Start	Oty To Follow
	SUT25-132US SAFETT CLAMP 132HN 7.25T C/S GALYANIZED CAN BOLTS	1	1	(
	COCERT-HYDREI Hydrostatic pressure test certificate	1	1	(
	OUCERT-LONG LONG TEST CERTIFICATES	1	1	ť
and the second second	ogprenskt Innolar) outrolkom freisigt Pre-pay i and to final innolge Kote: Materia, hist se accorpanier sy paperagar includtas Ine purchase groer, rig humbr to ensure proper payment	1	1	1
	•			e.
		PA	$\left \right $	

CIPSE annimonate interpreta and Proceeds describe until paid for its full. Any describe at abortogo at this delivery much be adultion which is delivery much be adultion within 6 dates.

Reserve may be extigated to a handling distribe.



Project: Eddy County, NM Site: Cypress 28 Fed. Well: Well #3H Wellbore: OH

Plan: Plan #1 (Well #3H/OH)



Magnetic North: 7.76°

Magnetic Field Strength: 48733.4snT Dip Angle: 60.19° Date: 2010/03/02 Model: IGRF2010



WELL DETAILS: Well #3H

Ground Elevation: 3020.50 RKB Elevation: RKB to MSL @ 3045.50ft (H&P 370) Rig Name: H&P 370

Slot Longitude 103° 59' 48.89703 W Latittude 32° 16′ 51.90397 N Easting 603968.50 Northing 466138.90 +E/-W 0.00 +N/-S 0.00

				SE	ECTION DE	ETAILS				
	MD	Inc	Azi	TVD	S-/N+	+E/-W	DLeg	TFace	VSec	Target
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00)
•	5771.35	0.00	0.00	6771.35	0.00	0.00	0.00	0.00	0.00	
w	8251.85	88.83	88.57	7726.08	23.34	935.14	9.00	88.57	935.43	
	3623.05	88.83	88.57	7774.50	82.50	3305.10	0.00	0.00	3306.13	BHL #3H



TARGET CENTERLINE TVD @ 0' VS: 7,707'

Start Build 6.00

6771

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BHL #3H

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West(-)/East(+) (1000 ft/in)

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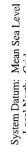


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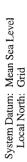
PROJECT DETAILS: Eddy County, NM Geodetic System: US State Plane 1927 (Exact solution) Datum: NAD 1927 (NADCON CONUS)

Zone: New Mexico East 3001

Magnetic Model: IGRF2010

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Vertical Section at 88.57° (600 ft/in)

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PathFinder Energy Services





Gombanv: OXV Pernian	OXY Permian			Local Co-ordinate Referenc	e: /Well-Well#3H	
Project	Eddy County,	NN		TVD Reference: The Reference That I was a second of the se	## RKB to MSL @ 3045.50ft (H&P. 370)	
Site:	Cypress 28 Ft			MD/Reference:	RKB to MSL @ 3045.50ft (H&P 370)	
Well	Well #3H			North Reference:	PIID	
Wellbore	OH .			 Survey Calculation Method: 	* * Minimum Curvature	
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Project	DII	Eddy County INIV				
Map System:	US State F	US State Plane 1927 (Exact solution)		System Datum:	Mean Sea Level	
Geo Datum:	NAD 1927	NAD 1927 (NADCON CONUS)				
Map Zone:	New Mexic	New Mexico East 3001				
A STATE OF THE STA					The second se	大小 のは被禁者には以上
Site	Cy.	Cypress;28 Fed:				
Site Position:			Northing: 463	463,378.60 ft Latitude:		32° 16' 24.58087 N
From:	Мар		Easting: 604	604,188.10 ft Longitude:		103° 59' 46.44003 W
Position Uncertainty:	tainty:	0.00 ft	Slot Radius:	Grid C	Grid Convergence:	0.18 °
	•					

Well	Well #3					
Well Position	S-/N+	0.00 ft	Northing:	466,138.90 ft	Latitùde:	32° 16′ 51.90397 N
	+E/-W	0.00 ft	Easting:	603,968.50 ft	Longitude:	103° 59' 48.89703 W
Position Uncertai	ainty	0.00 ft	Wellhead Elevation:	#	Ground Level:	3,020.50#

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COMPASS 2003.16 Build 42H



PathFinder Energy Services





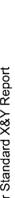
RKB to MSL @ 3045.50ft (H&P.370). RKB to MSL @ 3045.50ft (H&P.370) North Reference.
Survey Calculation Method:

Landmark Network DB. Well Well #3H 6.00 6.00 9.00 6.00 6.00 6.00 6.00 6.00 00.9 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00 Local Co-ordinate Reference: 8.65 16.66 27.23 40.35 117.43 142.59 199.50 231.10 264.68 300.16 337.42 376.39 416.93 458.95 74.07 94.57 169.97 502.33 546.95 592.68 639.41 687.00 TVDReference MDReference 0.01 2.93 3.56 4.98 7.49 9.40 11.46 1.01 1.85 2.36 10.41 14.79 15.96 5.77 6.61 8.65 16.66 27.24 74.09 117.47 170.02 199.56 231.17 264.76 300.25 337.53 376.50 417.06 459.09 502.48 547.12 40.37 56.00 94.60 142.63 592.87 639.61 687.21 Planned Survey.

MD Azī (ft) (0) (3) (6) (7) -3,754.50 3,804.41 3,854.11 3,903.46 -3,952.32 -4,000.56 -4,048.05 -4,094.66 -4,140.25 -4,269.73 -4,348.80 -4,385.82 4,421.04 -4,454.35 -4,485.66 -4,514.90 4,541.96 -4,589.32 -4,609.48 -4,642.49 -4,184.71 -4,310.07 -4,566.80 -4,627.22 4,227.91 -4,655.24 ,531.16 ,587.46 ,046.06 ,230.21 ,315.23 ,355.57 7,394.30 7,466.54 ,612.30 3,800.00 7,140.16 ,273.41 6,849.91 5,948.96 6,997.82 ,093.55 7,185.75 ,431.32 499.85 ,560.40 7,634.82 ,654.98 ,672.72 7,687.99 7,700.74 6,899.61 88.57 Company OXY Permian Project Eddy County NM Site: Cypress 28 Fed Well: Well#3H Wellbore: OH Design: Plan #1 10.72 13.72 22.72 25.72 28.72 31.72 34.72 37.72 40.72 43.72 46.72 49.72 55.72 58.72 70.72 73.72 7,850.00 6,900.00 7,050.00 7,100.00 7,450.00 7,550.00 7,700.00 7,800.00 6,800.00 6,850.00 6,950.00 7,000.00 7,150.00 7,200.00 7,250.00 7,300.00 7,350.00 7,400.00 7,500.00 7,600.00 7,650.00 7,750.00 7,900.00 7,950.00 8,000.00 8,050.00 COMPASS 2003.16 Build 42H



PathFinder Energy Services PathFinder Standard X&Y Report





		Anna Carachara (Anna Carachara) Anna Anna Anna Anna Anna Anna Anna An																									
Well Well #3H RKB to MSL @ 3045-50ft (H&P 370) RKB to MSL @ 3045-50ft (H&P 370) Grid Minimum Curvature Landmark Network DB		6.00	6.00	6.00	00.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Well Well #3H RKB'to WSL @ Grid Minimum Gury Landmark Net	(2/100#)					,											_							•	J	Ŭ)
Local Co-ordinate Reference: IND Reference: MD Reference: North Reference: Survey (Calculation Method: Database:	(j) E/W	784.25	833.64	935.14	983.26	1,083.21	1,183.16	1,283.11	1,383.05	1,483.00	1,582.95	1,682.90	1,782.85	1,882.79	1,982.74	2,082.69	2,182.64	2,282.59	2,382.53	2,482.48	2,582.43	2,682.38	2,782.33	2,882.27	2,982.22	3,082.17	3,182.12
Local Co-ordinate Referent TVD Reference: MD Reference: North Reference: Survey Calculation Method Database:	N/S (ft)	19.58	20.81	23.34	24.54	27.04	29.53	32.03	34.52	37.02	39.51	42.01	44.50	47.00	49.49	51.99	54.48	56.98	59.47	61.97	64.46	96.99	69.45	71.95	74.44	76.94	79.43
	V. Sec.	784.49	833.90	935.43	983.57	1,083.55	1,183.53	1,283.51	1,383.48	1,483.46	1,583.44	1,683.42	1,783.40	1,883.38	1,983.36	2,083.34	2,183.32	2,283.30	2,383.28	2,483.26	2,583.23	2,683.21	2,783.19	2,883.17	2,983.15	3,083.13	3,183.11
	1VDSS.	-4,665.45	-4,673.08	-4,680.58	-4,681.57	-4,683.61	-4,685.65	-4,687.69	-4,689.73	-4,691.78	-4,693.82	-4,695.86	-4,697.90	-4,699.94	-4,701.98	-4,704.03	-4,706.07	-4,708.11	-4,710.15	-4,712.19	-4,714.24	-4,716.28	-4,718.32	-4,720.36	-4,722.40	-4,724.45	-4,726.49
	TVD (ft)	7,710.95	7,718.58	7,726.08	7,727.07	7,729.11	7,731.15	7,733.19	7,735.23	7,737.28	7,739.32	7,741.36	7,743.40	7,745.44	7,747.48	7,749.53	7,751.57	7,753.61	7,755.65	7,757.69	7,759.74	7,761.78	7,763.82	7,765.86	7,767.90	7,769.95	7,771.99
	AZI (3)	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57	88.57
7	AZI ((j)	79.72	82.72	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83	88.83
Company: OXY Permi Project: Eddy Count Site: Cypress/28 Well: Well #3H: Wellione OH	Planned Survey MD (ff)	8,100.00	8,150.00	8,251.85	8,300.00	8,400.00	8,500.00	8,600.00	8,700.00	8,800.00	8,900.00	9,000.00	9,100.00	9,200.00	9,300.00	9,400.00	9,500.00	00.009,6	9,700.00	9,800.00	9,900.00	10,000.00	10,100.00	10,200.00	10,300.00	10,400.00	10,500.00

COMPASS 2003.16 Build 42H

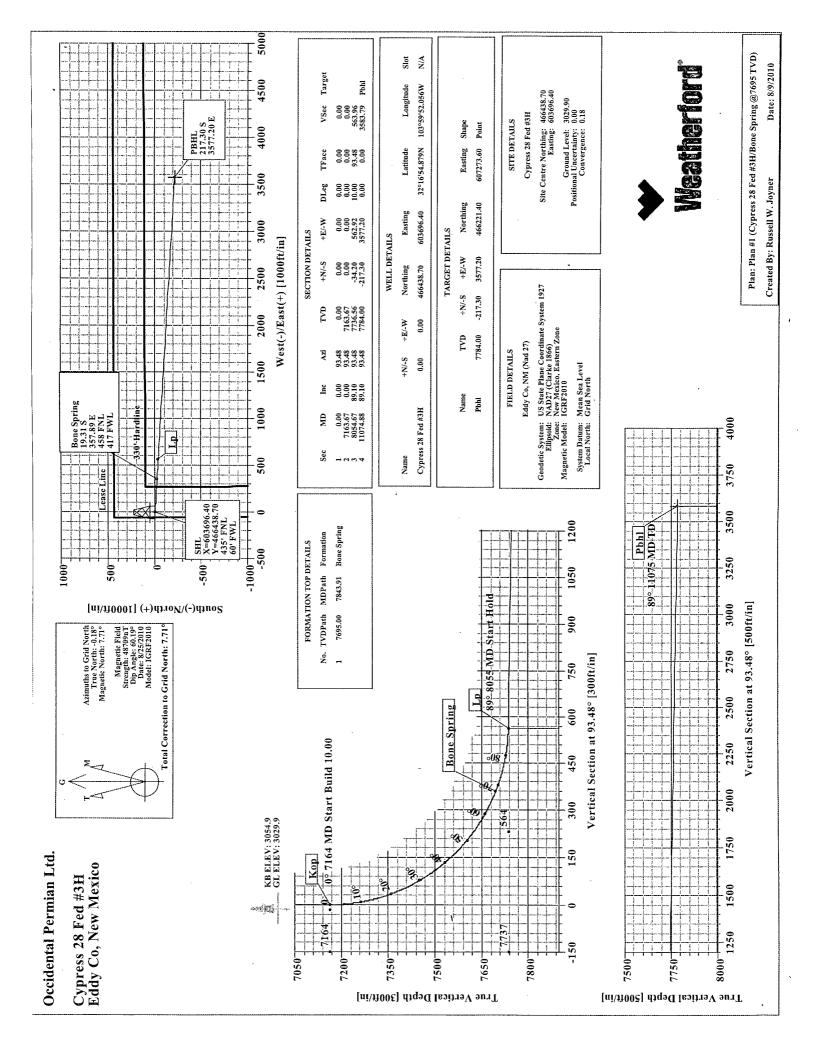
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PathFinder Energy Services

PathFinder Standard X&Y Report



Company OXY Permian Project: Eddy County, NM Sire Cypress 28 Fed Well: Well: Well#3H Wellbore: OH Plan#1-	OXY Permian Eddy County, NW Cypress 28 Fed Well #3H OH:					Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	Reference: Method:	Well Well #3H RKB to MSL @ 3045.50ff (H&P. 370) RKB to MSL @ 3045.50ff (H&P. 370) Grid Minimum Curvature Landmark Network DB))))
Plänned Survey MD (ft)	(j)	AŽI (9)	(f)	TVDSS	· V. Sec (用)	(h)	E/W (ff)	(\$/100ft)	
10,600.00 10,623.05	88.83 88.83	88.57 88.57	7,774.03 7,774.50	-4,728.53 -4,729.00	3,283.09 3,306.13	81.93 82.50	3,282.07 3,305.10	0.00	·
Targets Target Name - hit/miss target - Shape (9)	Dip:Angle	Dip:Dir	(u) QALI	+NS.	#E/2W (ft)	Northings (ft)	Easting (ff)	Eatitude	Longitude
PP - plan hits target center - Point	0.00 ter	00.00	7,725.50	23.34	935.14	466,162.24		604,903.64 32° 16' 52.10583 N 03° 59' 38.00314 W	38.00314 W
BHL #3H - plan hits target center - Point	0.00	0.00	7,774.50	82.50	3,305.10	466,221.40		607,273.60 32° 16' 52.61620 N 03° 59' 10.39424 W	10.39424 W
Checked By:				Approved By:				Date:	



Weatherford International Ltd. WFT Plan Report



Occidental Permian Ltd Company: Field: Eddy Co, NM (Nad 27) Site: Well:

Cypress 28 Fed #3H Cypress 28 Fed #3H Wellpath: Bone Spring @7695 TVD Date: 8/9/2010 Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Section (VS) Reference:

Time: 12:54:24 e. 12.04.24 Fage: Well: Cypress 28 Fed #3H, Grid North

SITE 3054.9

Well (0:00N;0:00E;93:48Azi)*

Plan:

Plan #1

Date Composed: Version: Tied-to:

8/9/2010

Db: Sybase Survey Calculation Method: Minimum Curvature

Principal:

Yes

From Surface

Field:

Eddy Co, NM (Nad 27)

Map System: US State Plane Coordinate System 1927

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Map Zone:

New Mexico, Eastern Zone

Coordinate System: Geomagnetic Model:

Well Centre IGRF2010

Site:

Cypress 28 Fed #3H

Site Position: Мар From: Position Uncertainty:

Ground Level:

Well Position:

Northing: Easting:

466438.70 ft 603696.40 ft Latitude: Longitude:

32 16 54.879 N 103 59

North Reference:

52.056 W Grid

Grid Convergence:

0.18 deg

Well:

Cypress 28 Fed #3H

+N/-S $\pm E/-W$

Wellpath: Bone Spring @7695 TVD

Northing: 0.00 ft 0.00 ft Easting:

466438.70 ft 603696.40 ft

Slot Name: Latitude: Longitude:

Drilled From:

54.879 N 32 16 103 59 52.056 W

Surface

Position Uncertainty:

0.00 ft

0.00 ft

3029.90 ft

Height 3054.90 ft

Tie-on Depth: Above System Datum: Declination:

Mean Sea Level 7.88 deg 60.19 deg

0.00 ft

Magnetic Data: Field Strength: **Vertical Section:**

Current Datum:

8/25/2010 48709 nT Depth From (TVD) ft

0.00

+N/-S ft 0.00

Mag Dip Angle: +E/-W ft 0.00

Direction

deg 93.48

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W	DLS deg/100f	Build t deg/1001	Turn ft deg/100		Target		1
0.00	0.00	93.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
7163.67	0.00	93.48	7163.67	0.00	0.00	0.00	0.00	0.00	0.00			
8054.67	89.10	93.48	7736.56	-34.20	562.92	10.00	10.00	0.00	93.48			
11074.88	89.10	93.48	7784.00	-217.30	3577.20	0.00	0.00	0.00	0.00	Pbh!	•	

Survey

MD- ft	Incl deg	Azim deg	TVD ft	N/S ft.	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
7100.0	0.00	93.48	7100.00	0.00	0.00	0.00	0.00	0.00	0.00	
7163.6	7 0.00	93.48	7163.67	0.00	0.00	0.00	0.00	0.00	0.00	Kop
7200.0	3,63	93.48	7199.98	-0.07	1.15	1.15	10.00	10.00	0.00	,
7300.0		93.48	7298.72	-0.98	16.11	16.14	10.00	10.00	0.00	
7400.0	23.63	93.48	7393.36	-2.91	47.96	48.05	10.00	10.00	0.00	
7500.0		00.40	7404.00	F 00	05.70	05.04		40.00	2.00	
7500.0		93.48	7481.02	-5.82	95.73	95.91	10.00	10.00	0.00	
7600.0		93.48	7559.03	-9.60	157.97	158.26	10.00	10.00	0.00	
7700.0	53.63	93.48	7625.04	-14.14	232.79	233.22	10.00	10.00	0.00	
7800.0	0 63.63	93.48	7677.02	-19.31	317.91	318.49	10.00	10.00	0.00	
7843.9	1 68.02	93.48	7695.00	-21.74	357.89	358.55	10.00	10.00	0:00	Bone Spring
7900.00		93.48	7713.41	-24.95	410.74	411.50	10.00	10.00	0.00	
8000.00	83.63	93.48	7733.10	-30.89	508.48	509.42	10.00	10.00	0.00	
8054.6	7 89.10	93.48	7736.56	-34.20	562.92	563.96	10.00	10.00	0.00	Lp
8100.00	89.10	93.48	7737.27	-36.94	608.16	609.28	0.00	0.00	0.00	
8200.00	89.10	93.48	7738.84	-43.01	707.96	709.27	0.00	0.00	0.00	
8300.00		93.48	7740.41	-49.07	807.77	809.25	0.00	0.00	0.00	
8400.00	89.10	93.48	7741.98	-55.13	907.57	909.24	0.00	0.00	0.00	

Weatherford International Ltd. WFT Plan Report



Company: Occidental Permian Ltd., Field: Eddy Co. NM (Nad 27). Site: Cypress 28 Fed #3H. Well: Cypress 28 Fed #3H. Wellpath: Bone Spring @7695 TVD

Section (VS) Reference: Survey Calculation Method:

Date: 8/9/2010 Time: 12:54:24 Page: 2
Co-ordinate(NE) Reference: Well: Cypress 28 Fed #3H, Grid North
Vertical (TVD) Reference: SITE 3054:9
Section (VS) Reference: Well (0.00N 0.00F-93 48Azi)

Well (0.00N,0.00E,93.48Azi)
Minimum Curvature **Db**: Sybase

Survey

	· MD	Incl	Azim	TVD	N/S	βE/W			Build	Turn	Comment	
	ft	deg	deg	i, ft	ft	ft	ft to c	leg/100ft. d	eg/100ft d	leg/100ft		
	8500.00	89.10	93.48	7743.56	-61.19	1007.37	1009.23	0.00	0.00	0.00		
	8600.00	89.10	93.48	7745.13	-67.26	1107.18	1109.22	0.00	0.00	0.00		
	8700.00	89.10	93.48	7746.70	-73.32	1206.98	1209.21	0.00	0.00	0.00		
1	9999 99	00.40	02.40	7740 07	70.00	4000 70	4000 40	0.00	0.00	0.00		
-	8800.00	89.10	93.48	7748.27	-79.38	1306.78	1309.19	0.00	0.00	0.00		
	8900.00	89.10	93.48	7749.84	-85.44	1406.59	1409.18	0.00	0.00	0.00		ľ
	9000.00	89.10	93.48	7751.41	-91.51	1506.39	1509.17	0.00	0.00	0.00		ĺ
	9100.00	89.10	93.48	7752.98	-97.57	1606.19	1609.16	0.00	0.00	0.00		l
ļ	9200.00	89.10	93.48	7754.55	-103.63	1706.00	1709.14	0.00	0.00	0.00		
1	9300.00	89.10	93.48	7756.12	-109.69	1805.80	1809.13	0.00	0.00	0.00		
	9400.00	89.10	93.48	7757.69	-115.76	1905.61	1909.12	0.00	0.00	0.00		İ
- [9500.00	89.10	93.48	7759.26	-121.82	2005.41	2009.11	0.00	0.00	0.00		
- [9600.00	89.10	93.48	7760.83	-127.88	2105.41	2109.09	0.00	0.00	0.00		İ
-	9700.00	89.10	93.48	7762.40	-133.95	2205.02	2209.08	0.00	0.00	0.00		ı
	3700.00	09.10	30.40	1102.40	-133.93	2203.02	2209.00	0.00	0.00	0.00		
1	9800.00	89.10	93.48	7763.98	-140.01	2304.82	2309.07	0.00	0.00	0.00		1
	9900.00	89.10	93.48	7765.55	-146.07	2404.62	2409.06	0.00	0.00	0.00		
	10000.00	89.10	93.48	7767.12	-152.13	2504.43	2509.04	0.00	0.00	0.00		l
İ	10100.00	89.10	93.48	7768.69	-158.20	2604.23	2609.03	0.00	0.00	0.00	ř	l
	10200.00	89.10	93.48	7770.26	-164.26	2704.04	2709.02	0.00	0.00	0.00		
-												
	10300.00	89.10	93.48	7771.83	-170.32	2803.84	2809.01	0.00	0.00	0.00		
	10400.00	89.10	93.48	7773.40	-176.38	2903.64	2909.00	0.00	0.00	0.00		
Н	10500.00	89.10	93.48	7774.97	-182.45	3003.45	3008.98	0.00	0.00	0.00		l
	10600.00	89.10	93.48	7776.54	-188.51	3103.25	3108.97	0.00	0.00	0.00		
	10700.00	89.10	93.48	7778.11	-194.57	3203.05	3208.96	0.00	0.00	0.00		ĺ
												ĺ
	10800.00	89.10	93.48	7779.68	-200.63	3302.86	3308.95	0.00	0.00	0.00		
П	10900.00	89.10	93.48	7781.25	-206.70	3402.66	3408.93	0.00	0.00	0.00		
	11000.00	89.10	93.48	7782.82	-212.76	3502.47	3508.92	0.00	0.00	0.00		
	11074.88	89.10	93.48	7784.00	-217.30	3577.20	3583.79	0.00	0.00	0.00	Pbhl ·	
H												Į

Targets

Name Description Dip.	TVD Dir. ft	+N/-S ft	+E/-W	Map Northing It	Map Easting ft	< Deg	Latitude> Min Sec	< l Deg	.ongitu Min S	de> ec
Pbhl .	7784.00	-217.30	3577.20	466221.40	607273.60	32	16 52.616 N	103 5	59 10.3	94 W

Casing Points

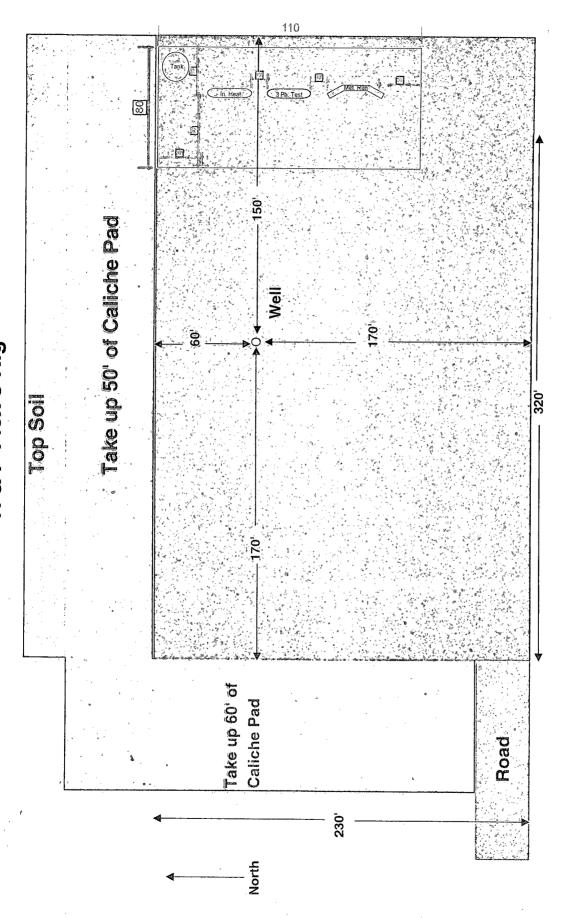
	MD TVD Diameter Hole Size Name
ĺ	

Formations

MD ft	TVD ft	Formations	Eithology	Dip Angle Di deg	p Direction deg
7843.91	7695.00	Bone Spring		0.00	0.00

Annotation

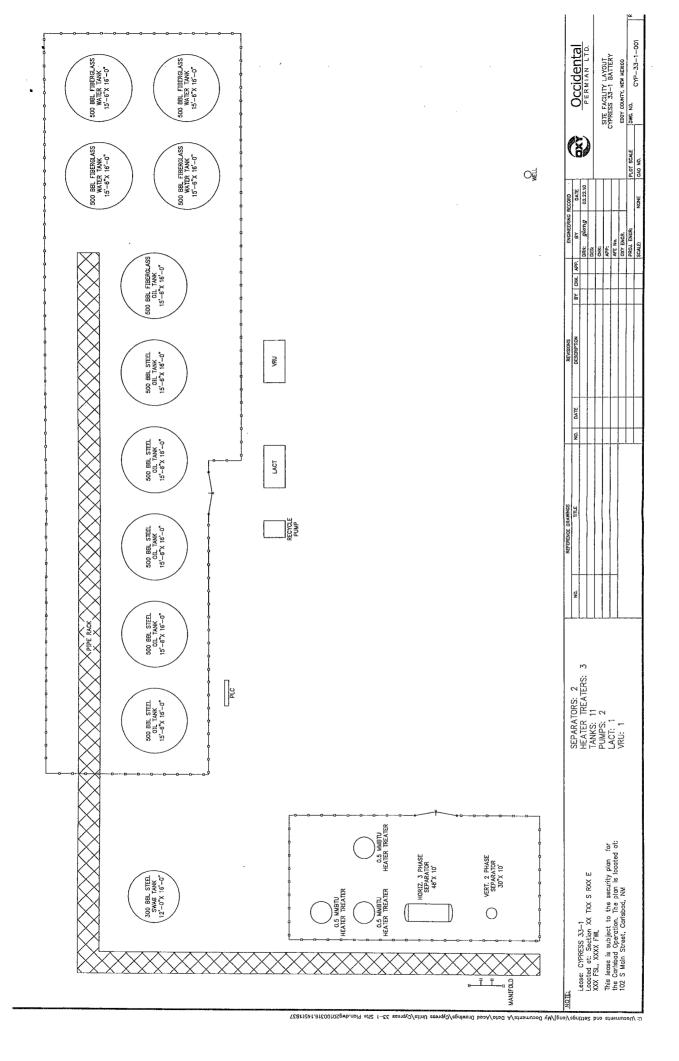
MD ft	TVD ft		
7163.67	7163.67	Kop	
8054.67	7736.56	Lp	
11074.88	7784.00	Pbhl	

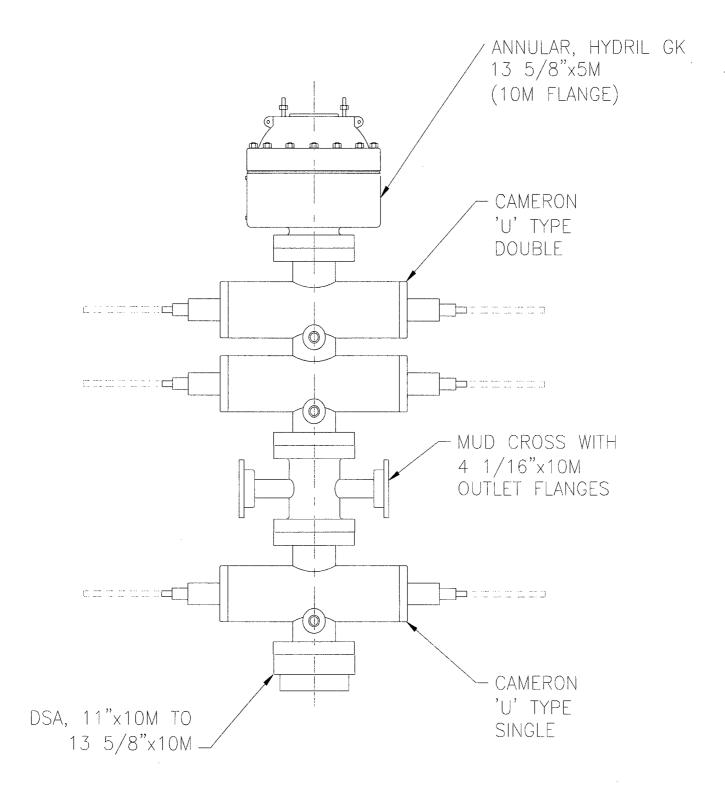


If road comes into the Southwest corner of pad Oxy will take up and re-seed 60' on east side and 50' on north side of pad

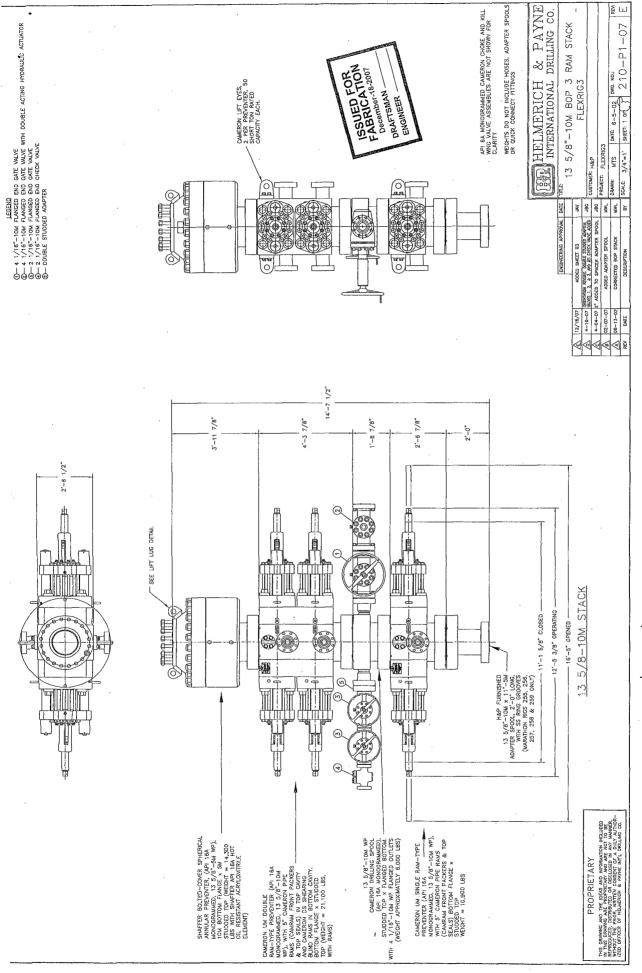
1 ea. In-Line Heater (30"x10') 1 ea. 3-Phase Tester (36"x10')

1 ea. Meter Run 1 ea. Swab Tank (300 bbl)

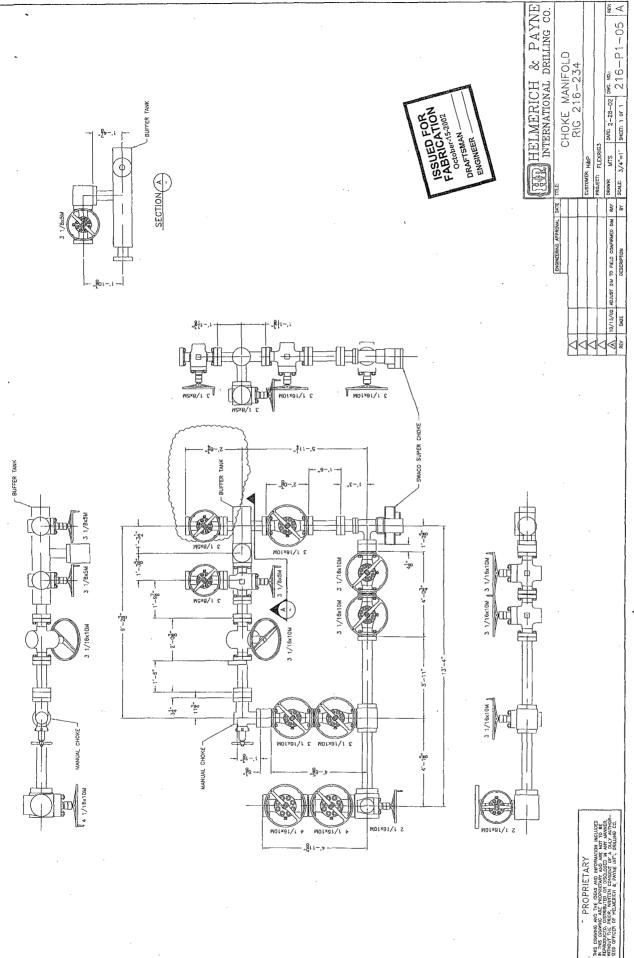




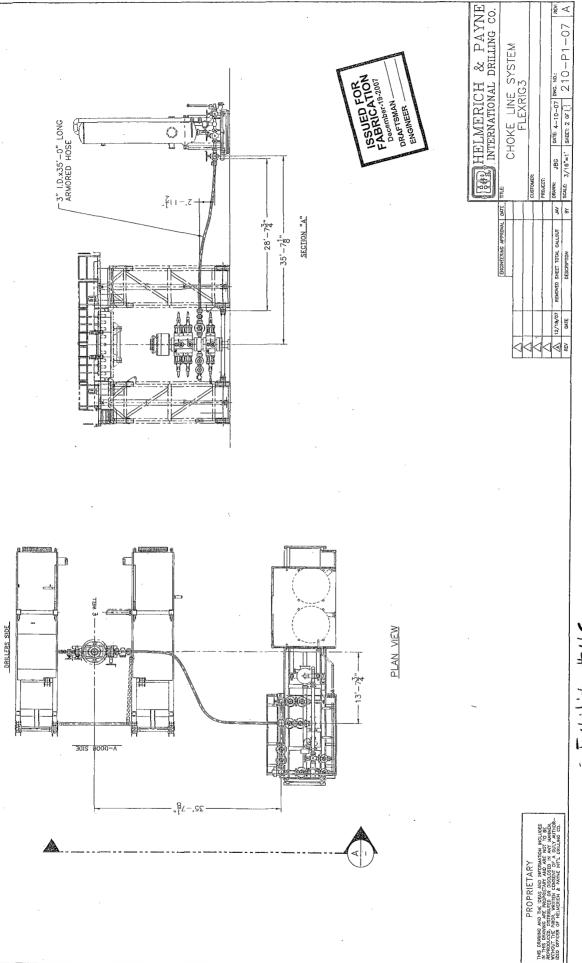
BOP STACK



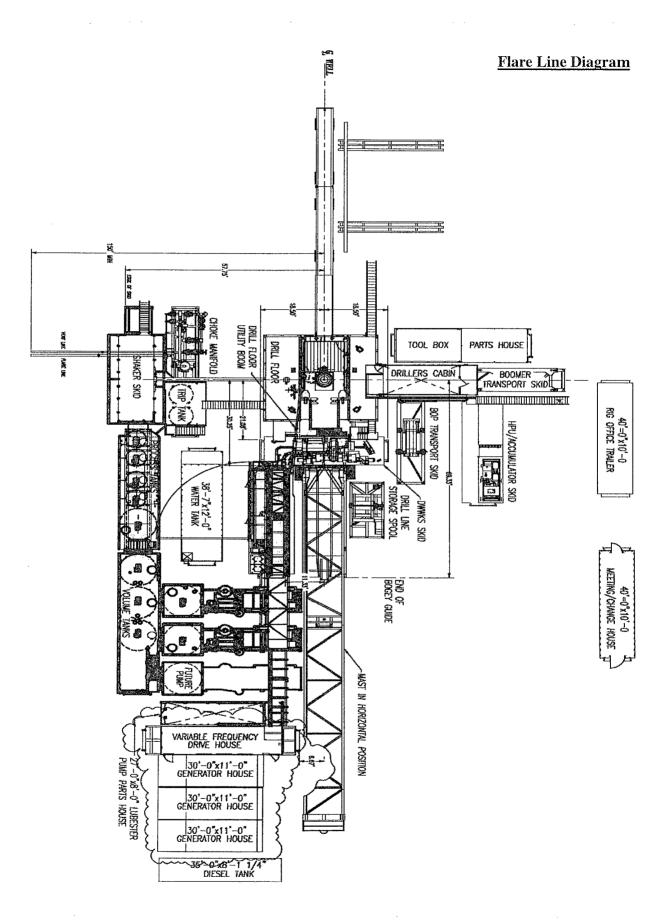
上で、では 井上本

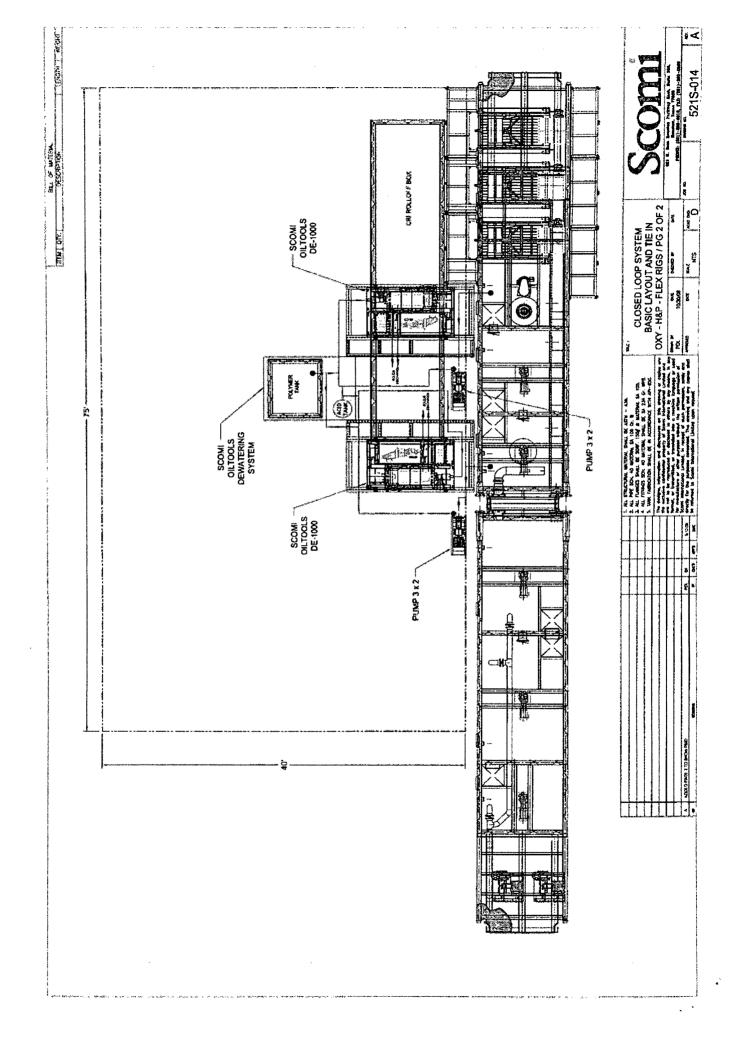


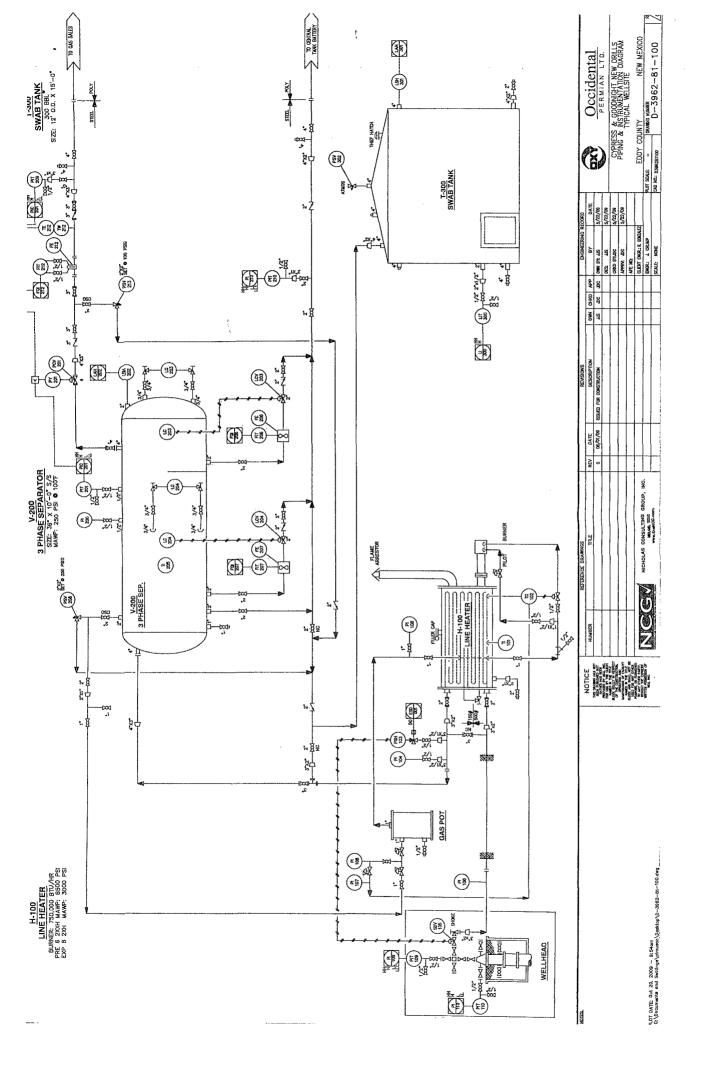
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OXY FLEX III PAD (SCOMI Closed Loop System)

to drive off pad & maneuver drk into position Clear all brush + 20' off pad to allow Drk truck Preferred road 113 170, 1) To of mouse hole below ground level
2) if conductor pipe is less than & Delow ground level, recommend cement mouse hole in place in order to prevent break that & circulation it washout than mouse hole mouse hole in place in order to prevent break that & circulation it washout than mouse hole place.
3) Use 44' (mir. Morthat also) pipe. This can be spiral weld or low pressure pipe, 10 3/4" is used in some applications but due to finacouracies in location of mouse hole & potentiat out of alignment or centered in hole. (4' pipe recommended.
4) Cament mouse hole in 16 1/2" or 18 3/4" hole.
5) Cellar will need to be oblang in order to accommodate mouse hole (1.e. 5' x 10', 6' x 10',) SEATH ROWERDS Notes for Rotating Mouse hole for a FlexRig3 & 25' Substructure: TOTAL HOMES CO LINE WILLIAM LDE 1000
Dewatering system
DE 1000
CRI rolloff box YOLDHIE THANS Level Area-No Caliche-For Offices and Living Quarters ... Operator decision H-7.17.-0" RIES VA PRODES PARS THE THEFT û 🎝 CADATE MARKEL Flare pit Well 150 4 Mousehole Alternate road di. 30

OXY Permian

EMERGENCY ACTION PLAN

CYPRESS 28 Federal #3H

DRILLING/WORKOVER
DRILLING AND CRITICAL WELL OPERATIONS

DRILLING/WORKOVER DRILLING AND CRITICAL WELL OPERATIONS

EMERGENCY ACTION PLAN

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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.

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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:
 - 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.

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.
- 6. Record drill pipe and casing shut-in pressures and pit volume increase and begin kill sheet.

Derrickman:

- 1. 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.
- 6. 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:

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

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.

Derrickman: (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.

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 onsite.

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.
- 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.

BOMB THREAT

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 person taking callI			ne # call came on
FILL OUT COM	IPLETELY IMMEDIA	TELY AFTER BOI	MB THREAT	
 Where is the What does t What type o What will ca Did the calle Why did the What is the Callers: Sex	bomb set to explode bomb located?he bomb look like?he bomb is it?use the bomb to explor place the bomb?caller place the bomb caller's name and addAgeRaceLer	ode? o? dress? ngth of call		
Calm Angry Excited Slow Loud	Rapid Crying Normal Distinct Slurred	Laughing Raspy Deep Ragged Nasal	Lisp Accent Stutter Deep Clearing Throa	Disguised Familiar? Who did it sound like? Deep Breathing at
BACKGROUNI	D SOUNDS:			
Street NoisesVoicesOffice	House Noises Motor Clear	Factory Machinery Animals Other	Music Static PA System	Local CallLong DistancePhone Booth
THREAT LANG	GUAGE:			
Message R	nFoul ead by Threat Maker		Irrational	Taped
REMARKS:				

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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.
- 3. Stay away from power lines.
- 4. Cover your head with your arms and clothing.

Thunderstorms

Indoors:

- 1. 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.
- 5. Turn off, unplug, and stay away from appliances, computers, power tools, & TV sets.

In the field:

- 1. 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.

Drilling Dept. Emergency Contact list

Drilling Manager Richard Jackson 713-215-7235 office

281-467-6383 cell

Drilling Superintendent Nelson Emery 713-215-7357 office

281-467-2862 cell

Drilling Superintendent Sergio Abauat 432-366-5689 office

432-893-3067 cell

HES Specialist-Drilling Brian Bielss 432-685-5719 office

432-813-6335 cell

HES Specialist-Drilling Robert Lovelady 432-685-5630 office

432-813-6332 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

(713) 935-7210

	•	, ,	
Person	Location	Office Phone	Cell/Mobile Phon
A got Monogoment Onewations Areas			
Asset Management-Operations Areas OXY Permian President & General Manager:			T .
Ken Dillon	Houston	(713) 366-5140	(661) 333-9315
Operations Support Manager: Vicki Hollub	Houston	(713)-215-7332	(713) 885-6347
Asset Development Manager-Jeff Simmons	Houston	(713) 366-5124	(713) 560-8073
Public Affairs: Stacey Crews	Houston	(713) 366-5304	(713) 416-8381
Operations South-Frontier			
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-Keith Sevin	Midland	(432) 685-5749	(432) 661-4121
WST Coord Frontier-Terrell Rowe	Midland	(432) 685-5821	(432) 664-8888
WST Coord South-Randy Baker	Midland	(432) 685-5913	(432) 661-3892
NM Frontier Oper Coord –Marvin McElroy	Carlsbad	(432) 652-8607	(806) 215-6750
NM-South Oper Coord-Gilbert Williams	Seminole	(432) 385-2778	(806) 215-0009
NM Frontier Oper Coord -Van Barton	Carlsbad	(575) 628-4111	(575) 706-7671
Completion Specialist-Dale Redding	Hobbs	(432) 385-3206	
HES Staff & Areas of First Contact Support			
HES Manager: John Kirby Environmental Engineer, Air: Peggy	Houston	(713) 366-5460	(281) 974-9523
Waisanen	Midland	(432) 685-5673	(432) 894-1968
Administrative Assistant: Judy Browning	Midland	(432) 685 5692	(432) 661 1048
Environmental Consultant: Dennis Newman	Houston	(713) 366-5485	(713) 560-8060
Safety Engineer: Derek Purvis	Houston	(713) 366-5932	(713) 582-1848
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			
Lead-Liz Bush-Ivie	Houston	(713) 366-5303	832-474-3701
	120000011	(113) 300-3303	1 556 177 5701

Regulatory Analyst-David Stewart	Midland	(432) 685-5717	
Regulatory Analyst-Elizabeth Casbeer	Midland	(432) 685-5755	
Regulatory Analyst-Mark Stephens	Houston	(713) 366-5158	
DOT-Pipeline Response Numbers			
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
OOGC HES Contacts			
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	1		
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	
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			
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

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Bureau of Land Management	Carlsbad, NM	(575) 887-6544
Bureau of Land Management	Hobbs, NM	(575) 393-3612
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
	•	(505) 827-7152
New Mexico OCD Environmental Bureau	Santa Fe, NM	(505) 476-3470
New Mexico Environmental Department	Hobbs, NM	(575) 827-9329
NM State Emergency Response Center	Santa Fe, NM	(505) 827-9222
	District 8, 8A Midland,	
Railroad Commission of TX	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

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	TW
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	
Jerry Reynolds	Lea County, NM	(575) 396-8600	(575) 399-2376

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Royce Creager	Loving County, TX	(432) 377-2231
Mike Cherry	Quay County, NM	(575) 461-2476
Della Wetsel	Union County, NM	(575) 374-8896
Bonnie Leck	Winkler County, TX	(432) 586-6658
Carl Whitaker	Yoakum County, TX	(806) 456-7491
Law Enforcement - Sheriff		
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
T T C		
Law Enforcement - Police	A . 1 7777	(422) 522 5(75
Andrews City Police	Andrews, TX	(432) 523-5675
Artesia City Police	Artesia, NM	(575) 746-2704
Carlsbad City Police	Carlsbad, NM	(575) 885-2111
Clayton City Police	Clayton, NM	(575) 374-2504
Denver City Police	Denver City, TX	(806) 592-3516
Eunice City Police	Eunice, NM	(575) 394-2112 (575) 397-9265
Hobbs City Police	Hobbs, NM	(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
Law Enforcement - FBI		
FBI	Alburqueque, NM	(505) 224-2000
FBI	Midland, TX	(432) 570-0255
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
ΓX Dept of Public Safety	Andrews, TX	(432) 524-1443
TIZED A CD 11' C C .	Seminole, TX	(432) 758-4041
ΓΧ Dept of Public Safety ΓΧ Dept of Public Safety	Yoakum County TX	(806) 456-2377

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Amistad/Rosebud, NM

Amistad/Rosebud

(505) 633-9113

		(432) 523-4820
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
Seminole	Seminole, TX	(432) 758-367.6 (432) 758-9871

Ambulance

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	
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	

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SURFACE USE PLAN OF OPERATIONS

Operator Name/Number: OXY USA Inc. 16696

Lease Name/Number: Cypress 28 Federal #3H 37803 Federal Lease No. NMNM86024

Pool Name/Number: South Laguna Salado Bone Spring - 96857

Surface Location: 435 785 FNL 280 FWL NWNW(D) Sec 28 T23S R29E

Bottom Hole Location: 660 FNL 1700 FEL NWNE(B) Sec 28 T23S R29E

2060'

1. Existing Roads

a. A copy of a USGS "Remuda Basin, New Mexico" 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 7/8/08, certified 7/21/08.
- c. At the intersection of Hwy 128 and Hwy 18, go west on Hwy 128 for 48.1 miles. Turn south on CR 793 (Rawhide) for 3.5 miles, turn west on lease road for 4.4 miles. Turn north on proposed roas for 0.1 miles to location.

2. New or Reconstructed Access Roads:

- a. A new access road will be built. The access road will run approximately 537' north 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 Cypress 28 Federal tank battery would be utilized and the necessary production equipment will be installed at the well site and the tank battery. See proposed Production Facilities Layout diagrams, 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, see 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

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: Tyson Mahaffey P.O. Box 161 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	\$1,339.00	\$0.15/ft over 1/4 mile	\$0.00	\$1,339.00
Pipeline - up to 1mile	\$1,236.00	\$250 per 1/4 mile	\$0.00	\$1,236.00
Electric Line - up to 1mile	\$618.00	\$0.17/ft over 1 mile	\$0.00	\$618.00
Total	\$3,193.00	_	\$0.00	\$3,193.00

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.

Marvin McElroy	Larry Sammons
Production Coordinator	Production Lead
P.O. Box 50250	P.O. Box 50250
Midland, TX 79710	Midland, TX 79710

Sergio Abauat Calvin (Dusty) Weaver
Drilling Superintendent Operation Specialist
P.O. Box 4294 P.O. Box 50250
Houston, TX 77210 Midland, TX 79710

Office Phone: 432-366-5689 Office Phone: 432-685-5723 Cellular: 432-893-3067 Cellular: 806-893-3067

Camilo Arias

Drilling Engineering Supervisor

P.O. Box 4294

P.O. Box 4294

P.O. Box 4294

P.O. Box 4294

Houston, TX 77210

Office Phone: 713-366-5953

P.O. Box 4294

Houston, TX 77210

Office Phone: 713-215-7849

Cellular: 281-468-4652 Cellular: 713-303-7298

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 day of Murch, 2010.

To an to a sill
Name: Barry Beresik Reusik
Position:Reservoir Management Team Leader
Address:5 Greenway Plaza, Suite 110, Houston, TX 77046
Telephone:713-366-5016
E-mail: (optional):barry_beresik@oxy.com
Company:OXY USA Inc
Field Representative (if not above signatory):Marvin McElroy
Address (If different from above): _P.O. Box 50250 Midland, TX 79710
Telephone (if different from above):432-652-8607 - 806-215-6750
E-mail (if different from above):marvin_mcelroy@oxy.com

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:,	OXY USA, Inc.
LEASE NO.:	NM86024
WELL NAME & NO.:	Cypress 28 Federal # 3H
SURFACE HOLE FOOTAGE:	0435FNL & 0060' FWL
BOTTOM HOLE FOOTAGE	0660' FNL & 1700' FEL
LOCATION:	Section 28, T. 23 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

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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
Production facilities
Cave/Karst
⊠ Construction
Notification
V-Door Direction
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
☐ Road Section Diagram
☑ Drilling
R-111-P Potash
High Cave/Karst
Casing Requirements
H2S – Onshore Order 6 Requirements
Logging Requirements
Waste Material and Fluids
☐ Production (Post Drilling)
Well Structures & Facilities
Pipelines
☐ 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)

Production facilities

If production facilities are built on location, they should be constructed on the west side of the well pad to allow for increased interim reclamation unless other arrangements are made with the authorized officer.

Cave and Karst

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

Tank Battery Liners and Berms:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

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. V-DOOR DIRECTION: east

C. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

D. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

E. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

F. 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.

G. 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

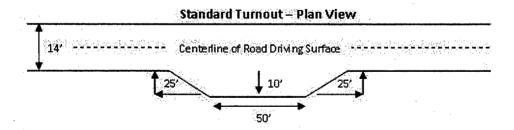
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

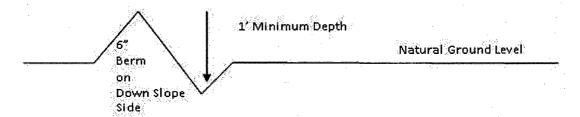


Drainage

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

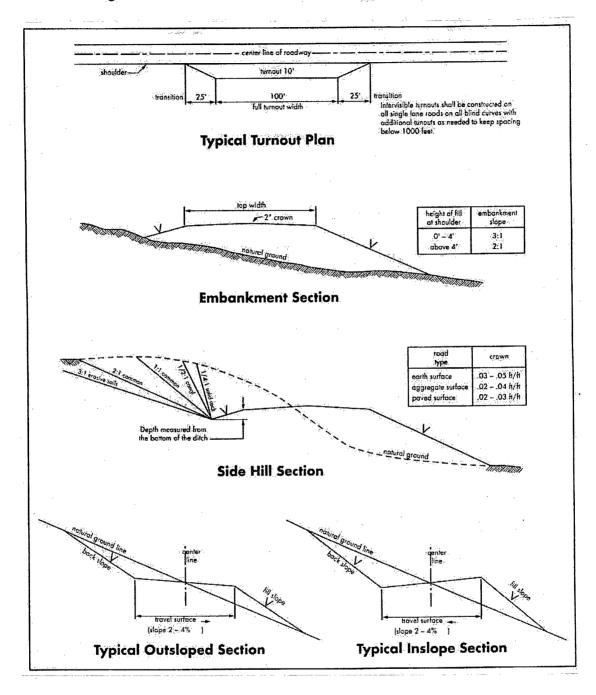
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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
- b. 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. Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 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 are located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are 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 prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. 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- Potash High cave/karst

- 1. The 13-3/8 inch surface casing shall be set at approximately 380 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. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - 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 9-5/8 inch intermediate casing is: The intermediate should be set at approximately 2940 within the 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 cave/karst and potash.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

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

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - Ement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
 - b. Second stage above DV tool, cement shall:
 - Ement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
 - c. Third stage above Pack-off Stage 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.

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 (Serial #'s 52754, 52755, 52776, 52777, 52778 52782) 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.
 - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
 - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.
 - e. 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.

f. 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.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

EGF 100510

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 (not applied for in APD)
- C. ELECTRIC LINES (not applied for in APD)

IX. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation 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 that is free of contaminants 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.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared; these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 1, for Loamy 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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 lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed