7037

OCD-ARTESIA
FEB 13 2009

ATS-09-178

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NM 119755 SHL
NM-100555 BHL

6. If Indian, Allotee or Tribe Name
---

7. If Unit or CA Agreement, Name and No.

1a. Type of work: [X] DRILL [ ] REENTER

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No. √
COOPER "29" FEDERAL # 1H

2. Name of Operator
OGX RESOURCES, LLC. (JEFF BIRKELBACH 432-685-1287)

9. API Well No.
30-015-36932

3a. Address P. O. BOX 2064
MIDLAND, TEXAS 79702

3b. Phone No. *(include area code)*
432-685-1287

10. Field and Pool, or Exploratory
ROCK SPUR-BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 2230 ~~1980~~' FSL & 560 ~~660~~' FWL SECTION 29 T25S-R29E EDDY CO. NMSN 1/13/09 CR
At proposed prod. zone BWH 1980' FSL & 350' FEL SEC. 29 T25S-R29E

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 29 T25S-R29E

14. Distance in miles and direction from nearest town or post office*
Approximately 11 miles Southeast of Malaga New Mexico

12. County or Parish
EDDY CO.

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)
330'

16. No. of acres in lease
160

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
NA

19. Proposed Depth
MR- ~~11907~~' 12122
TVD- ~~7922~~ 8080

20. BLM/BIA Bond No. on file
NMB_000244

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
2937' GL

22. Approximate date work will start*
WHEN APPROVED

23. Estimated duration
38 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature Joe T. Janica — Name *(Printed/Typed)* Joe T. Janica — Date 12/24/08

Title Permit Eng.

Approved by *(Signature)* /s/ Don Peterson — Name *(Printed/Typed)* /s/ Don Peterson — Date FEB 1 1 2009

Title FIELD MANAGER — Office CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**(Instructions on page 2)*

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

60-5
2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA
294

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160 - 3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

5. Lease Serial No.
NM-100555

6. If Indian, Allottee or Tribe Name
---

7. If Unit or CA/Agreement, Name and/or No.
---

1. Type of Well
[XX] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
COOPER "29" FEDERAL # 1H

2. Name of Operator
OGX RESOURCES, LLC. (JEFF BIRKELBACH)

9. API Well No.
30-015-36932

3a. Address
P. O. BOX 2064
MIDLAND, TEXAS 79702

3b. Phone No. *(include area code)*
432-685-1287

10. Field and Pool, or Exploratory Area
ROCK SPUR-BONE SPRING

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
2230' FSL & 560' FWL SECTION 29 T25S-R29E EDDY CO. NM

11. County or Parish, State
EDDY CO. NEW MEXICO

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other
	[X] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

1. OGX RESOURCES, LLC requests the approval to move the location of their COOPER "29" FEDERAL # 1H FROM 1980' FSL & 660' FWL SECTION 29 T25S-R29E EDDY CO. NM
   TO 2230' FSL & 560' FWL SECTION 29 T25S-R29E EDDY CO. NM
2. The reason for this move is to comply with the request by The Bureau of Land Management.
3. This well will be drilled with a closed mud system.

Engr. Reviewed Directional Plan Incorrect – Replacement Rec'd in APD WWI 2/9/09

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Joe T. Janica

Title Permit Eng.

Signature Joe T. Janica

Date 01/08/09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /s/ Don Peterson
/s/ Don Peterson

Title FIELD MANAGER

Date FEB 1 1 2009

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

State of New Mexico

Energy, Minerals and Natural Resources Department

[redacted]ICH DR., HOBBS, NM 88240

[redacted]TRICT II
[redacted]01 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-36932	52775	ROCK SPUR-BONE SPRING

Property Code	Property Name	Well Number
37590	COOPER "29" FEDERAL	1H

OGRID No.	Operator Name	Elevation
217955	OGX RESOURCES	2932'

Surface Location

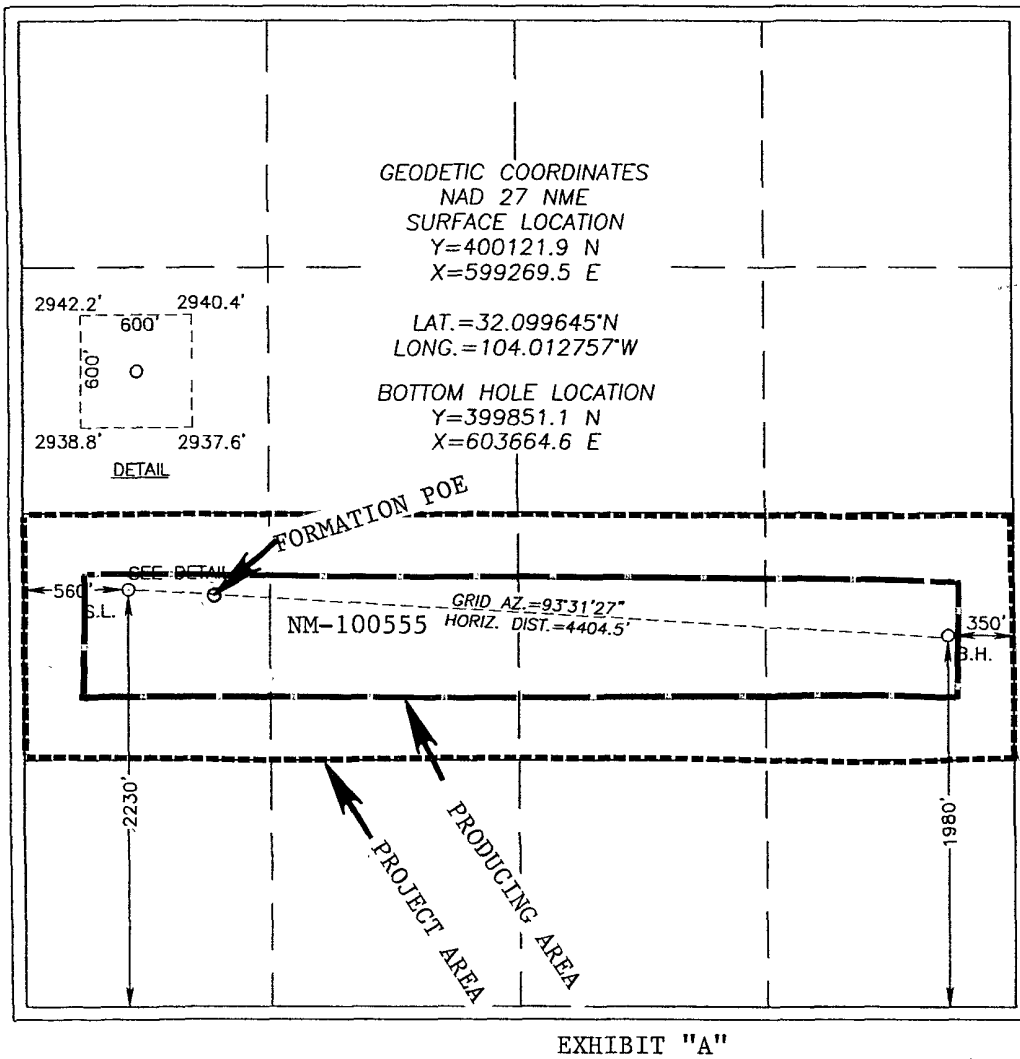
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	29	25-S	29-E		2230	SOUTH	560	WEST	EDDY

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
I	29	25-S	29-E		1980	SOUTH	350	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Joe T. Janica
Signature

01/08/09
Date

Joe T. Janica
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

JANUARY 05, 2009
Date Surveyed

Signature & Seal of Professional Surveyor

Ronald J. Eidson 01/07/09

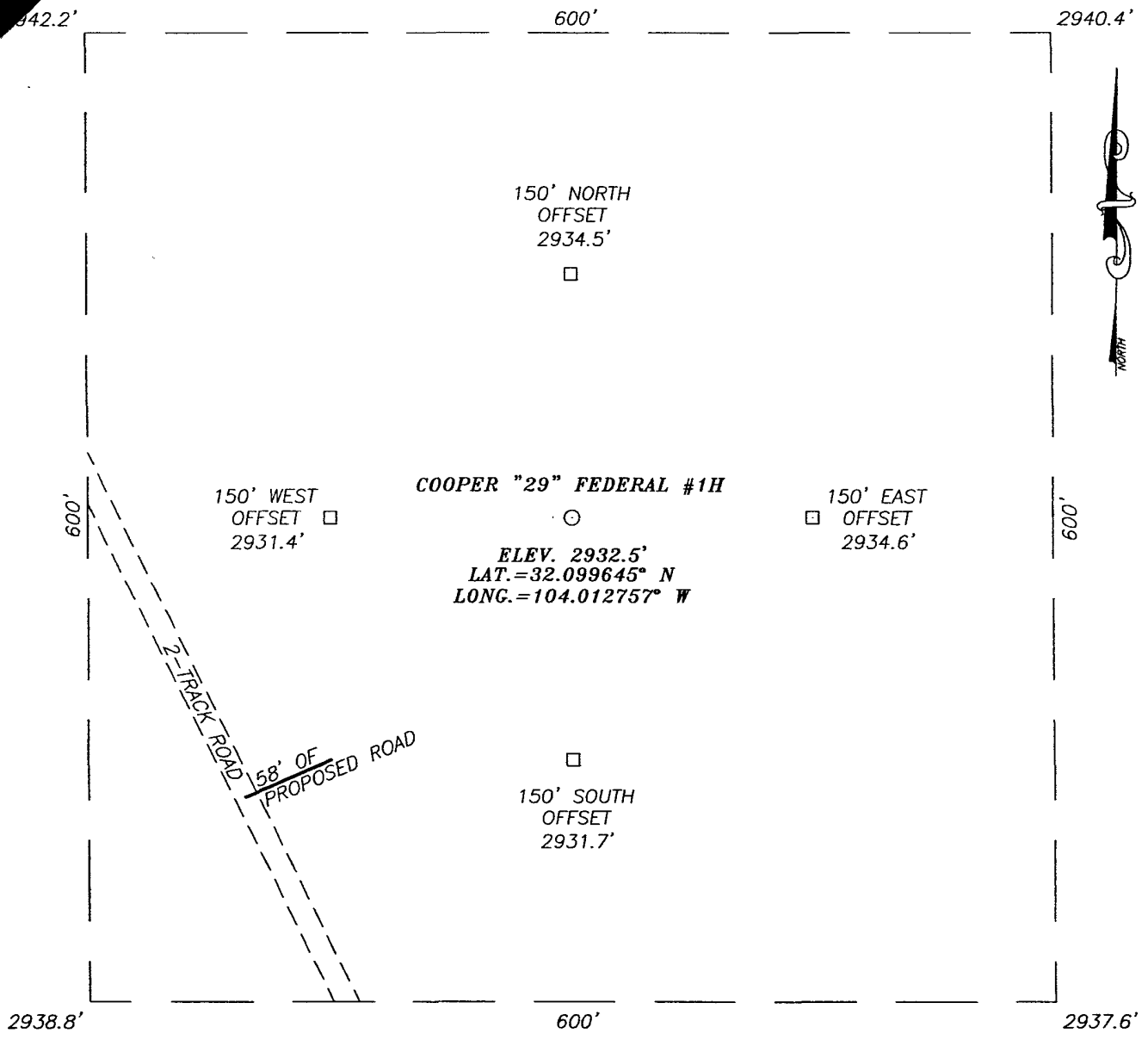
08111262

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

EXHIBIT "A"

N 29, TOWNSHIP 25 SOUTH, RANGE 29 EAST, N.M.P.M.,

DY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY #285 (PECOS HWY) AND CO. RD. #725 (LONGHORN RD.), GO NORTHEAST THEN SOUTHEAST ON CO. RD. #725 APPROX. 3.8 MILES. TURN LEFT AND GO NORTHEAST APPROX. 1.8 MILES. TURN LEFT AND GO NORTHWEST APPROX. 0.2 MILES. TURN LEFT AND NORTHWEST APPROX. 1.6 MILES. TURN RIGHT AND GO NORTHWEST APPROX. 0.7 MILES AT INTERSECTION ONTO A 2-TRACK ROAD TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY EAST APPROX. 58 FEET TO THIS LOCATION.

100 0 100 200 Feet

Scale: 1"=100'

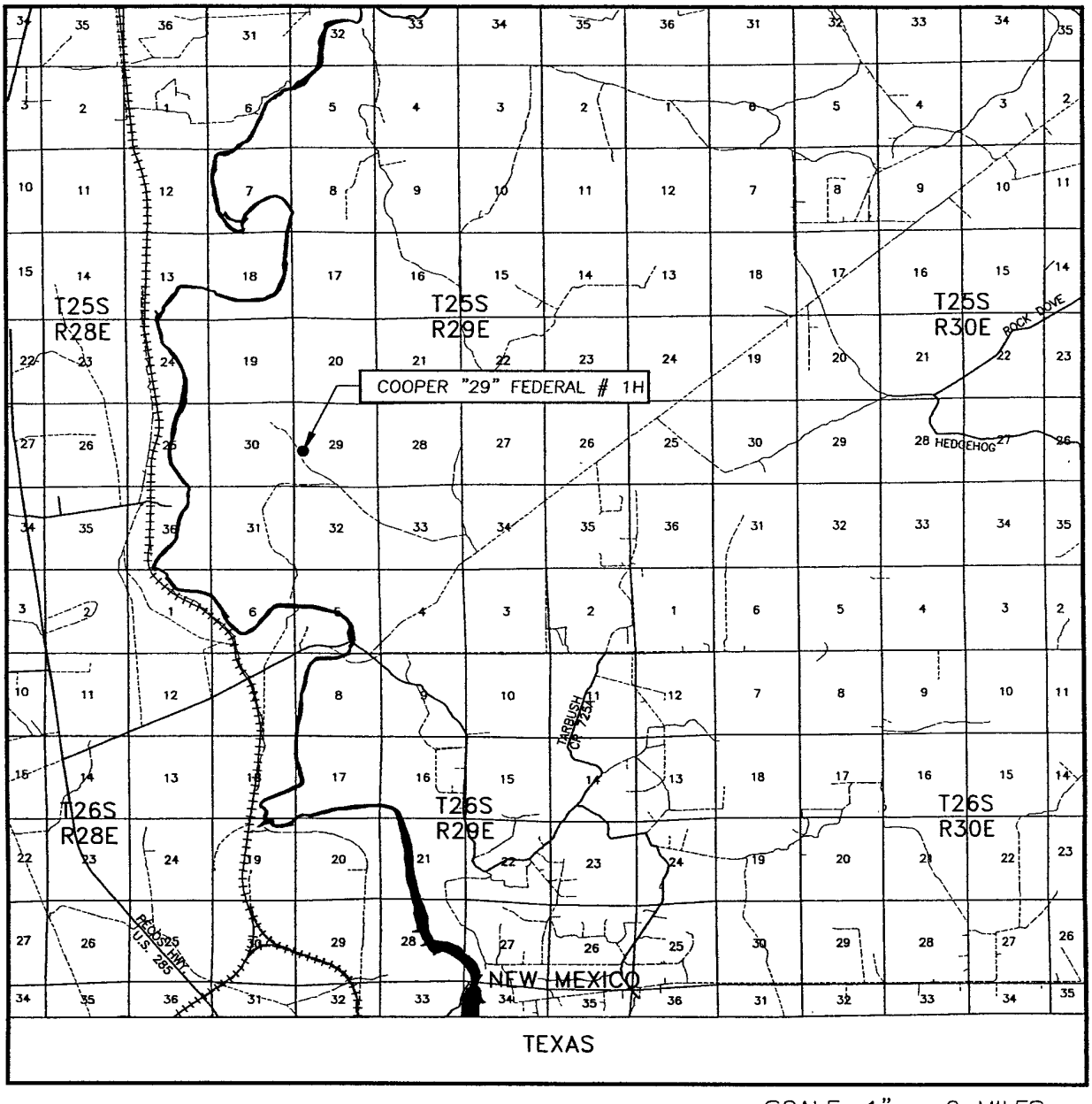
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

OGX RESOURCES

COOPER "29" FEDERAL #1H WELL
LOCATED 2230 FEET FROM THE SOUTH LINE
AND 560 FEET FROM THE WEST LINE OF SECTION 29,
TOWNSHIP 25 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 1/05/09	Sheet 1 of 1 Sheets	
W.O. Number: 08.11.2162	Dr By: DSS	Rev 1:11/26/08
Date: 1/06/08	08112162	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 29 TWP. 25-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 2230' FSL & 560' FWL

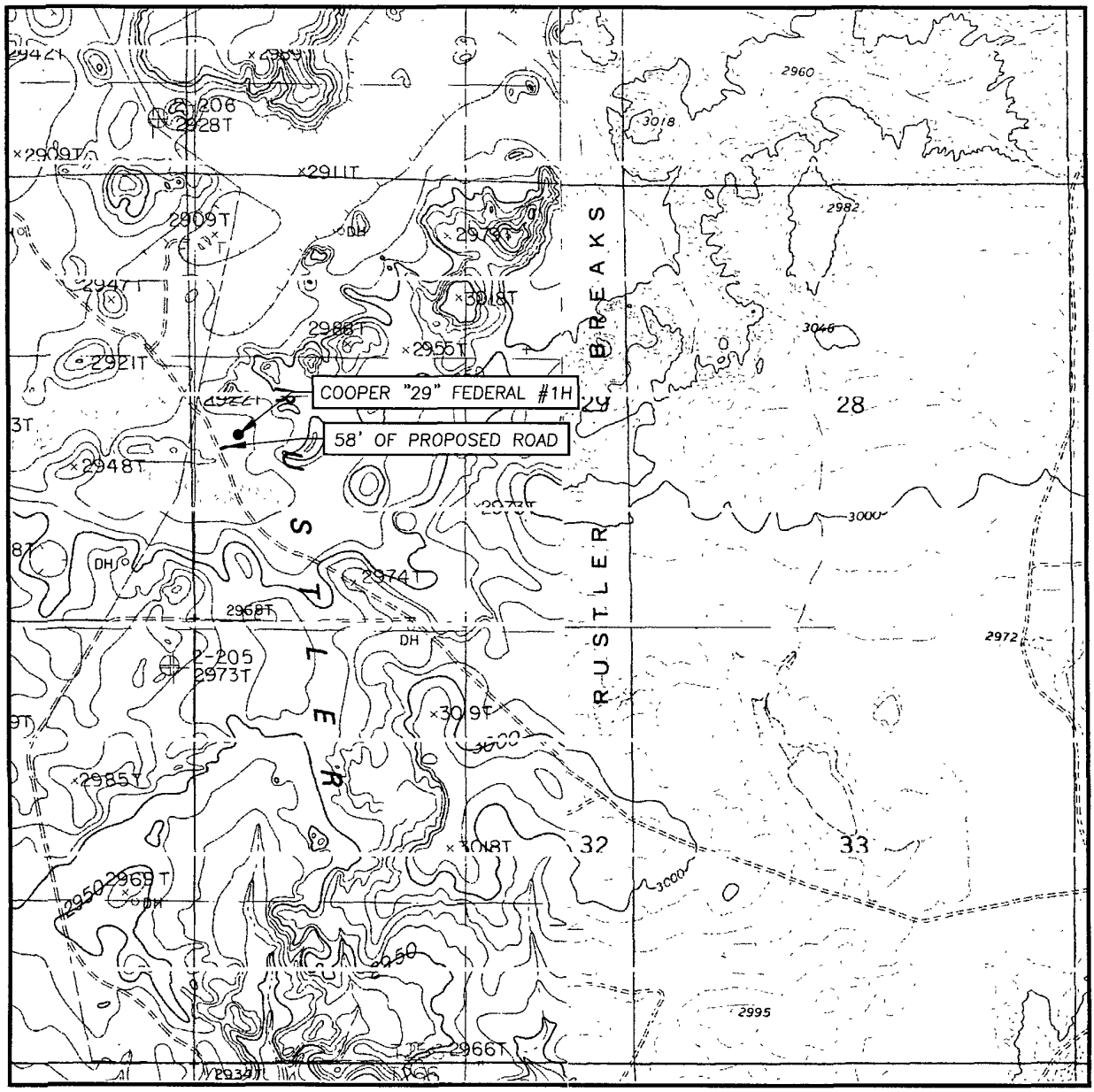
ELEVATION 2932'

OPERATOR OGX RESOURCES

LEASE COOPER "29" FEDERAL

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
ROSS RANCH, N.M. – 10'
RED BLUFF, N.M. – 10'
SUPPLEMENTAL CONTOUR – 5'

SEC. 29 TWP. 25-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 2230' FSL & 560' FWL

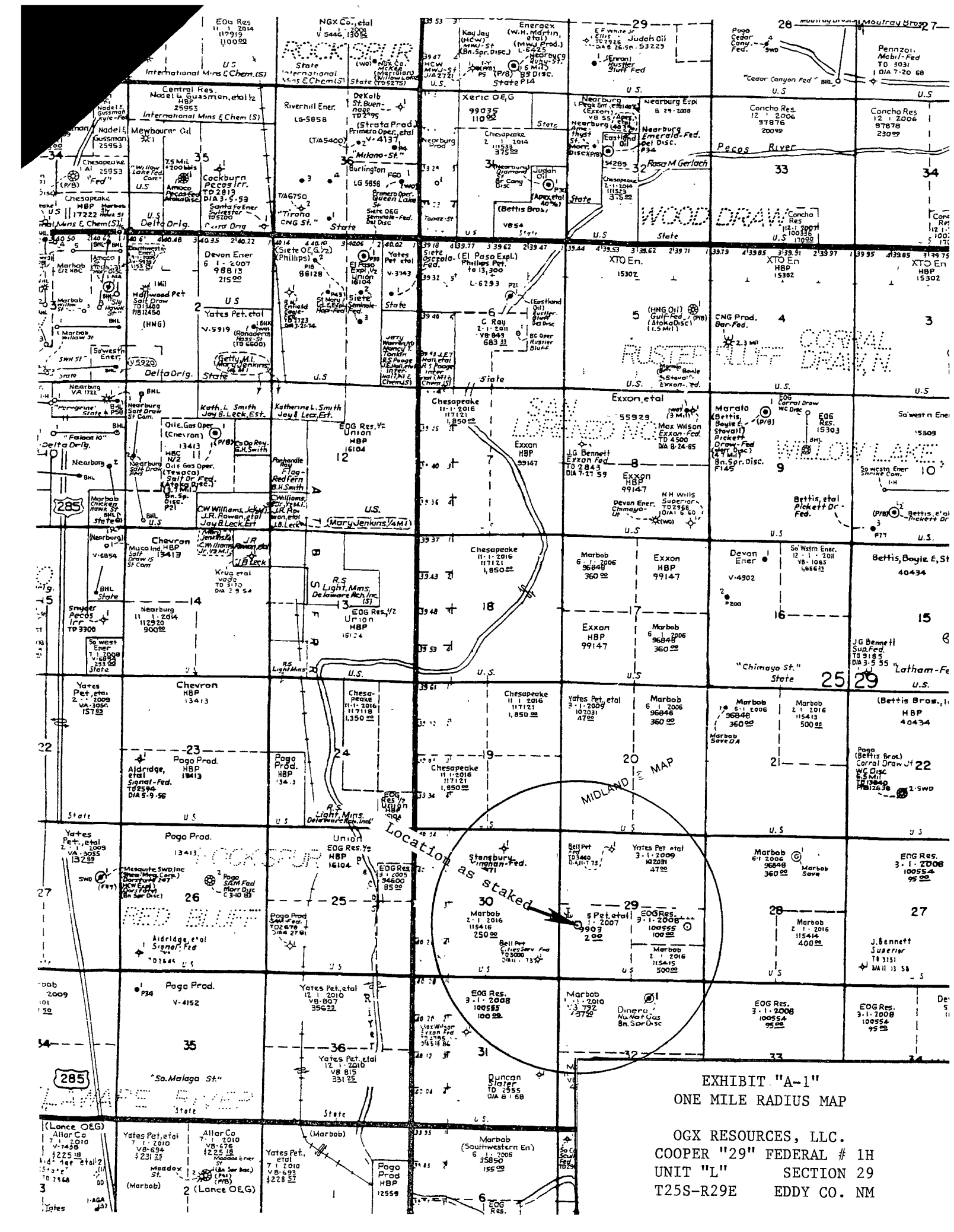
ELEVATION 2932'

OPERATOR OGX RESOURCES

LEASE COOPER "29" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
ROSS RANCH, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117


MIDLAND MAP
Location as staked
EXHIBIT "A-1"
ONE MILE RADIUS MAP
OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

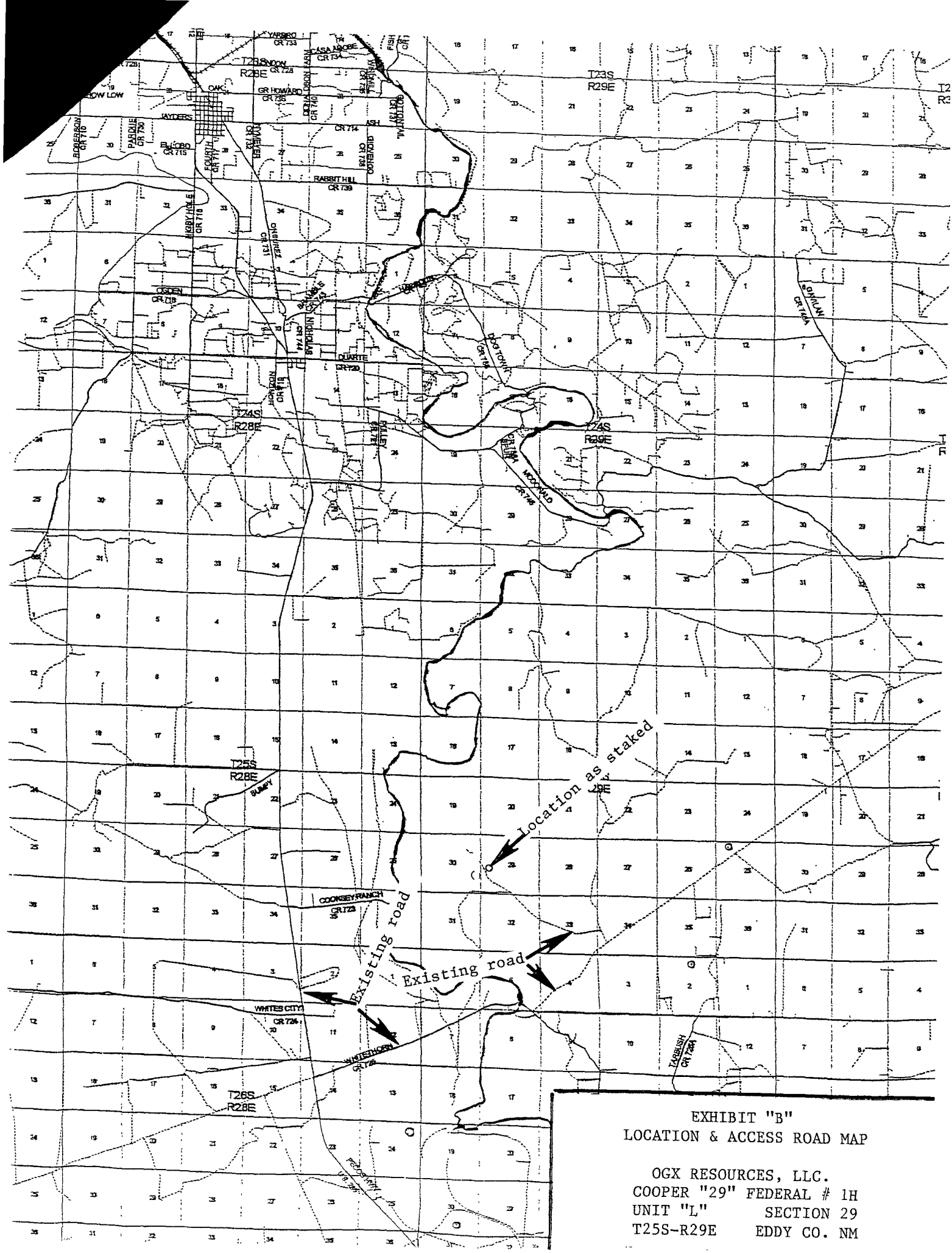


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

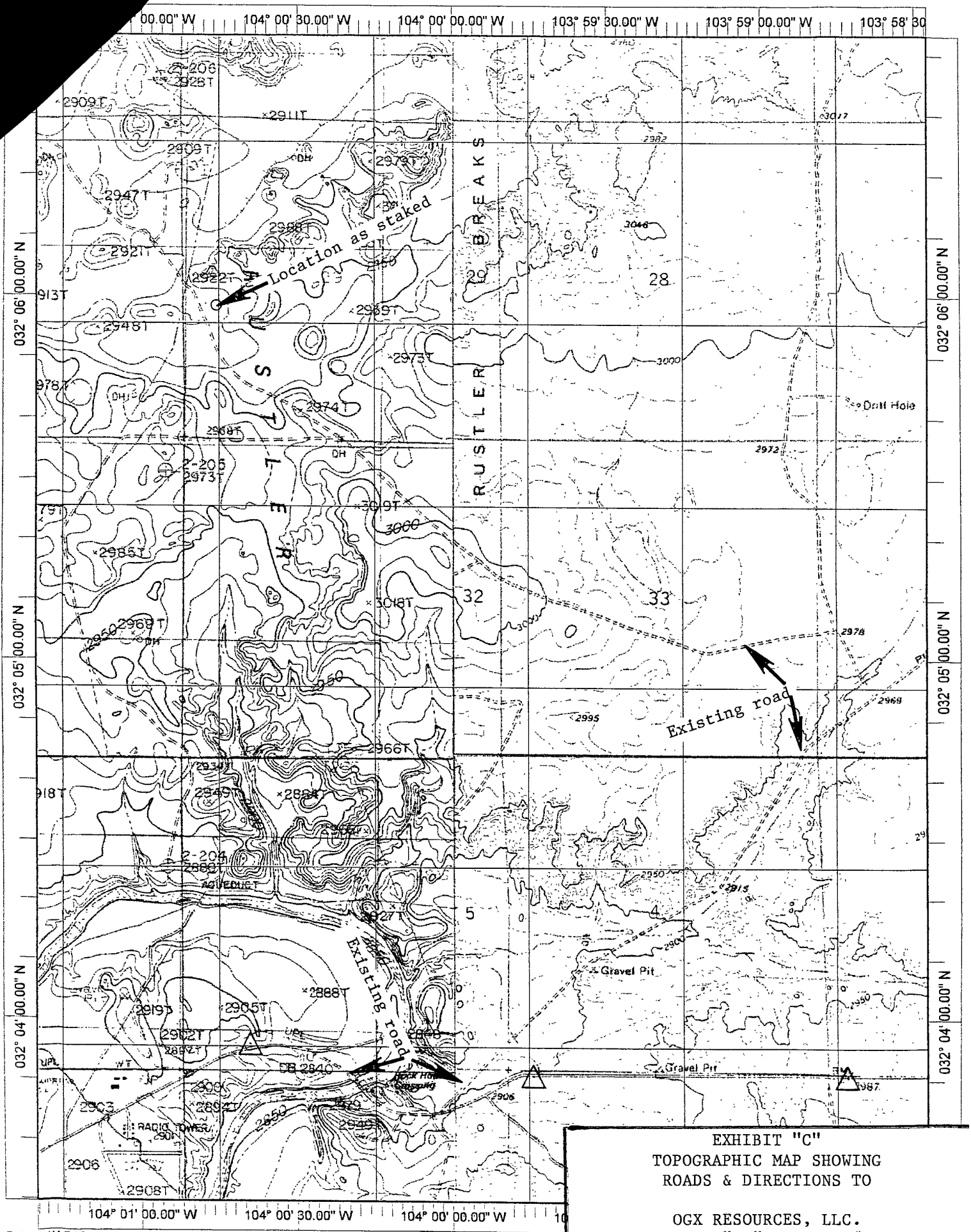


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

Cooper 29 Federal No.1H
Rock Spur (Bone Spring) Field
Eddy County, New Mexico
Drilling Procedure
Feb. 2008

General Information

Lease:	Cooper 29 Federal	AFE BCP:	$
Well No.:	1	AFE ACP:	
Field:	Rock Spur	AFE Total:	
County:	Eddy	AFE NO:	80150XX
State:	New Mexico	API No.:	30-015-XXXXX
Section:	29	Permit Date:	XX/XX/08
Township:	25S	Permit TVD:	8,500'
Range:	29E	Proposed MD:	12,122'
Section Ties:	2230' FSL & 560' FWL	Drilling Days:	32
Ground Level:	2932'	KB:	2948' (16')
Latitude:	32.099645" N	Longitude	104.012757" W

Well Objectives

The primary objective of this well is to drill the 1st Bone Spring intervals horizontal without a pilot hole. The well will be drilled to ~ 7,250', logged and taken horizontal.

Directions To Well

From 285 & 725. Est on 725 for 3.8 mi. / Lft (NthWst) for 1.8 mi. / Lft .25 mi. / veer Rt. For 1.6 mi. / veer Rt. On two track for .6 mi. (NthWst) / NthEst to Location.

Special Drilling Considerations

1. No hunting for game is permitted. No fire arms are to be taken to the location. Keep trash picked up on location and road.
2. Do not run hard-banded or hard-faced drill pipe in casing without consulting OGX.
3. Cement must be circulated on surface, intermediate. Attempt to circulate production . If cement does not circulate, run a temperature survey and contact the BLM and Operations Engineer for remedial instructions.
4. BOP equipment will be NU on the 13-3/8" surface casing. All safety and well control equipment should be rigged up and operational prior to drilling out the 13-3/8" casing shoe.

OGX **Resources Contact List**		
Operations Engineer	Steve Douglas	Mobile: 432-934-6800 Home: 432-682-1734
Operations Engineer	Jeff Birkelbach	Office: 432-685-1287 Home: 432-694-7880 Mobile: 432-553-0391
Vice President-Operations	Kip Agar	Office. 432-685-1287 Mobile 432-631-1736 Home: 432-685-4114
Geologist	Bill Hardie	Office: 432-685-1287 Cell: 432-553-0259
		Office:
Production Foreman		Mobile: Home: Pager:
Production Foreman-Assistant		Mobile: Home:
Landman		Office: 432-685-1287
Regulatory	Joe Janica Ann Richey	Office: 505-391-8503 Office: 432-684-6381
Drilling Well Supervision	Donny Leek	Cell: Mobile: 432-634-4862 Home: 432-399-4489

Vendor Contact List

Service	Vendor	Telephone Number	Contact / Location
Rig Contractor	JW Drilling	Office 505-748-8704	
		Rig 505-513-2414	
	Rig 1	Mobile: 505-513-2415	Tool Pusher
		Cell: 505-513-0321	
Casing	DGM Supply	Office: 432-686-0628	Rooster McCaugnhey
		Cell 432-556-8750	
Directional Drilling	PathFinder	Office: 432-687-1544	Ron McIntyre
		Cell: 432-559-5911	
Cementing	BJ Services	Office: 505-746-3140	Artesia
		Cell 432-556-6357	Randy Kuiper
Mud	Newpark	Cell: 432-697-8661	Midland
		Office 432-	
Mud Logging	Suttles	Office:: 432-687-3148	Frank Suttles
Open Hole Logs	Schlumberger	Office: 505-	Hobbs
Regulatory	BLM	Office: 505-887-6544	Carlsbad
		505-438-7400	Santa Fe
	NMOCD	Office: 505-393-6161	Hobbs
		505-748-1283	Artesia
Water-Fresh	Black River Machine & Water	Office: 505-706-5324	Jim Davis
		Mobile: 505-785-2319	
Wellhead	Cameron	Office: 505-397-1325	Jon Bulman
		Cell 505-631-2614	
BOP Testing / NU	Monahans Nippleup	Office: 800-753-7558	Vernon Venters
		Cell 432-940-8527	
Pit Lining & Poly Line	Dubose	Office: 432-550-9956	Buckshot
		Cell: 432-894-5049	
Pipe & Rentals	Smith International	Office: 432-570-0065	Ronnie Burnett
		Cell: 432-425-6534	
Dirt Contractor	B & H	Cell: 505-706-0551	Justin Magby
Closed Loop	Advanced	Cell:	

Vendor Contact List			
Service	**Vendor**	**Telephone Number**	**Contact / Location**
Bits	Hughes Tool Co.	Office: 505-392-1284 Mobile. 432- 230-7799	Hobbs Scott Newland - Midland
Liner Hanger	Halliburton	Office: 432-682-4305 Cell 432-631-4626	Midland Lynn Talley
Forklift		Office: Cell.	
Fuel	United	Office: 505-885-5560 Cell	Carlsbad Devan Spearman
		Office:	
Water – Brine & Fresh	Great Basin JWS C&R	Office: 505-628-3323 Cell: 505-706-1432 Office: 505-748-1352 Cell: 505-748-5140 Office 505-887-6697 Cell:	 Randy Billett Dimas Herrera Danhy Franco
Casing Crew	Bull Roger's	Office: 505-393-9342 Cell: 505-390-2008	 Nathan Jernigan

Emergency Contact List			
Service	**Vendor**	**Telephone Number**	**Contact / Location**
Ambulance/Fire		Office 505-885-2111	Carlsbad
Helicopter	Odessa Regional	Office: 432-624-3571	Odessa
Hospital		Office: 505-887-6633	Carlsbad
Sheriff's Office		Office: 505-887-7551	Carlsbad
State Police		Office: 505-885-3137	Carlsbad

DRILLING PROGRAM

Geologic Name of Surface Formation:

Permian

FORMATION TOPS / ANTICIPATED FRESH WATER, OIL, or GAS / PRESSURES

Formation	Depth	Frm Pres	Remarks
Rustler	950'	8.4 ppge	Water
Basal Anhydrite	2660'	10 ppge	Drlg fluid must be saturated salt water
Lamar	2800'	8.4 ppge	Base of Salt
Bell Canyon	2845'	8.4 ppge	Oil / Gas / Formation water /Poss.H_2S
Cherry Canyon	3665'	8.4 ppge	Oil / Gas / Formation water
Brushy Canyon	4820'	8.7 ppge	Oil / Gas / Formation water
1st BSS	7000'	9.1 ppge	Oil / Gas / Formation water
TVD	8500'		

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 525' and circulating cement back to surface. Potash/ fresh water sands will be protected be setting 9 5/8" casing at ~~2700~~ 2820' and circulating cement to surface. The hydrocarbon producing intervals will be isolated by setting 5 ½" casing to total depth and circulating cement to surface.

CASING PROGRAM:

HOLE SIZE	DEPTH	OD Csg	WEIGHT	COLLAR	GRADE	NEW/USED
17 ½"	0-525'	13 3/8"	48	STC	H40	New
12 ¼"	0-~~2700~~ 2820'	9 5/8"	36	STC	J55	New
8 ¾"	0-7200' MD	5 ½"	17	LTC	N80	New
8 ¾"	7200'-11907 MD	5 ½"	17	BTC	N80	New

(5 ½" BTC will be run thru the curve & Lateral)

DEPTH	OD Csg	WEIGHT	factors: Burst	/ Collapse	/ Tension
0-525'	13 3/8"	48	1.53	1.27	10+
0-2700'	9 5/8"	36	1.42	1.37	3.8
0-11907' MD	5 ½"	17	1.51	1.52	1.72

(51/2 Burst & Collapse Calculated @ 7900' TVD)

CEMENT PROGRAM:

13 3/8" Surface

Spacer .....50 bbls of fresh water
Slurry .....Lead: 35:65:6 – Poz: Prem Plus C + 6% Bentonite + 5% salt + 5% MPA-5 + .7% Sodium Metasilicate + 5 lbs LCM + 97.9 fresh water
Tail: Premium Plus C + 2% $CaCl_2$ + 56.4% Fresh Water

Cement Properties	Lead	Tail
Est Volume (sacks)	480	200
Density (ppg)	12.80	14.80
Yield (ft3/sx)	2.00	1.34
Mix Water, gps	10.21	6.36
Thickening Time, hrs:min		~3:30
Free Water, %		0
Fluid Loss, cc's		~850
Top of Cement	surface	

9 5/8" Intermediate

Spacer .....30 bbls of fresh water
Lead ..... 35:65 – Poz: Prem Plus C + 4% Bentonite + 5% salt + 5% MPA-5 + .7% Sodium Metasilicate + 5 lbs LCM + 99.6% fresh water
Tail .....C + 2% $CaCl_2$ + 56.4% fresh water

Cement Properties

	Lead	Tail
Est Volume (sacks)	600	200
Density (ppg)	12.7	14.8
Yield (ft3/sx)	2.02	1.34
Mix Water, gps	10.39	6.36
Thickening Time, hrs:min	4:07	3:32
Free Water, %	2.0	0
Fluid Loss, cc's	~750	~600
Top of Cement	600	

Kick-Off plug in Pilot Hole for Horizontal

360 sx Premium Plus H + 1% CD-32 + 29.6% Fresh water
17.5 ppg / 0.94 cf/sx / 3.33 mix watr

5 1/2" Production

Slurry Composition

Spacer .....30 bbls FW
Lead .....Premium Plus H + .7% FL-62 + .4% BA-10A + .1% FL-52 + 45.8% Fresh water
Tail .....50:50 Poz C + 10% Bentonite + 5% NaCl + 139.7% Fresh water

Cement Properties

	Lead	Tail
Estimated Volume, sx	735	725
Density, ppg	11.8	14.8
Yield, cf/sk	2.44	1.33
Mix water required, gps	14.07	6.33
Free Water, %		
Fluid Loss, cc		
Top of cement: surface		

The above cement volumes will be revised pending fluid and open hole caliper measurements.

MUD PROPERTIES SUMMARY:

Depth (feet)	Weight (ppg)	Viscosity (sec/1000cc)	Fluid Loss (cc/30min)	PV (cps)	YP (lb/100ft²)	Mud Type
0' – 525' **Set 13-3/8" Casing**	8.6 – 8.8	36 – 38	N/C	6 – 10	6 – 20	**Spud Mud**
525' – ~~2,700~~ 2820'	10.0 – 10.1	29 – 30	N/C	0 – 1	0 – 1	**Brine**
Set 9-5/8" Casing						
2,700' – 8,500' TVD **Pilot Hole**	8.4 – 10.0	28 – 29	N/C	0 – 1	0 – 1	**Fresh Water To Brine**
7,340' – 11,907' MD **Set 5-1/2"**	8.4 – 10.0	34 – 36	12 – 15	4 – 8	4 – 8	**Dynazan / Starch HB 411**

Auxiliary Well Control & Monitoring Equipment:

A Kelly cock will be in the drill string at all times.

A full opening drill pipe stabbing valve having the appropriate connections will be on the floor at all times.

H_2S detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 ½" csg is cemented.

LOGGING, CORING, AND TESTING

No logs at surface.

Mud loggers on below 13 3/8" casing shoe – no electric logs at intermediate depth

The Vertical Pilot (Production) hole will be logged: GR / Dual Laterolog / Neutron-Density / Caliper
Sidewall cores at depths TBD

No DST's or pressure testing is anticipated.

The horizontal lateral will be mud logged and GR via MWD.

Potential Hazards:

No abnormal pressures or temperatures are expected. There is no known presence of H_2S in this area. If H_2S Is encountered the operator will comply with the provisions of Onshore Oil & Gas Order No.6. No loss circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP is 3770 psi. & BHT is 135° F.

Anticipated Starting Date & Duration:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be ASAP subsequent to APD approval. Move in and drilling operations will take 38 days with an additional 30 days to complete the well and construct production facilities.

APPLICATION TO DRILL

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

In response to questions asked under Section II of Bulliten NTL-6, the following information on the above will be provided.

1. LOCATION: 1980' FSL & 660' FWL SECTION 29 T25S-R29E EDDY CO. NEW MEXICO

2. ELEVATION ABOVE SEA LEVEL: 2937' GL

3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits. Rustler

4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.

5. PROPOSED DRILLING DEPTH: MD-11,907' TVD-7922'

6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Rustler Anhydritre	950'	Cherry Canyon	3665'
Basal Anhydrite	2660'	Brushy Canyon	4820'
Lamar	2800	1st Bone Spring Sand	7000'
Bell Canyon	2845'	TVD	8500'

7. POSSIBLE MINERAL BEARING FORMATIONS:

Bell Canyon	Oil	Brushy Canyon	Oil
Cherry Canyon	Oil	Bone Spring	Oil

8. CASING PROGRAM:

HOLE SIZE	INTERVAL	OD OF CASING	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-40'	20"	NA	NA	NA	Conductor	New
17½"	0-525'	13 3/8"	48#	8-R	ST&C	H-40	New
12¼"	0-~~2700'~~ 2820' See COA	9 5/8"	36#	8-R	ST&C	J-55	New
8 3/4"	0-7200'	5½"	17#	8-R	LT&C	N-80	New
8 3/4"	7200-~~11,907'~~ 12122	5½"	17#	BUTTRESS	BT&C	N-80	New

CASING DESIGN FACTORS:

Collapse	1.125	Burst	1.00	Body Yield	1.5	Joint Strength	
						Buttress	1.6
						8-R	1.8

APPLICATION TO DRILL

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface YIELD: Lead 2.00 Tail 1.34	Run and set 525' of 13 3/8" 48# H-40 ST&C aasing. Cement with 480 Sx. of 35/65/6 Class "C" POZ cement + 5% Salt, + 5% MPA-5, + 0.7% Sodium Metasilicate, + 5# LCM , tail in with 200 Sx. of Class "C" Premium Plus cement + 2% CaCl, circulate cement to surface.
9 5/8"	Intermediate Yield: Lead 2.02 Tail 1.34	Run and set ~~2700'~~ 2820' of 9 5/8" 36# J-55 ST&C casing. Cement with 600 Sx. of 35/65 Class "C" Premium PLus cement + 4% Bentonite, + 5% Salt, + 5% MPA-5, + 0.7% Metasilicate, + 5# LCM, tail in with 200 Sx. of Class "C" Premium Plus cement + 2% CaCl, circulate cement to surface.
5½"	Production Yield: Lead 2.44 Tail 1.33	Run and set ~~11,907'~~ 12122' of 5½" casing as follows: ~~9207'~~ 4922' of 5½" 17# N-80 BT&C, ~~2700'~~ 2200' Of 5½" 17# N-80 LT&C casing. Cement with ~~735~~ 805 Sx. of Class "H" Premium Plus cement + 0.7% FL-62, + 0.4% BA-10A, + 0.1% FL-52, tail in with ~~725~~ 934 Sx. of 50/50 Class "C" + 10% Bentonite, + 5% Salt, circulate cement to surface

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middlw blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be worked when the drill pipe is out of the hole on trips. Full opening dtabbing valve and upper kelly cock will be on the derrick floor at all times. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI working pressure choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. Other wells drilled in this area do not show any indiaction of abnormal pressures or temperatures.

APPLICATION TO DRILL

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

11. PROPOSE MUD CIRCULATNIG SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-525'	8.6-8.8	36-38	NC	Fresh water Spid Mud, add paper to control seepage
525-~~2700'~~ 2820	10.0-10.1	29-30	NC	Brine water use paper to control seepage and high viscosity sweeps to clean hole.
2700-8500' ~~PILOT HOLE~~ No pilot hole per operator,	8.4-10.0	29-30	NC	Start with fresh water and allow to go to brine use paper to control seepage and high viscosity sweeps to clean hole.
7340-11907'	8.4-10.0	34-36	12-15 cc or less	Same as above but add Dynazan Starch HB-411 to control water loss.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation and/or unexpected kicks. In order to run DST's casing, cores or open hole logs the above mud properties may have to be altered to meet these needs.

APPLICATION TO DRILL

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Laterolog, Neutron/Density, Gamma Ray and Caliper from 8500' back to 9 5/8" casing shoe.

B Gamma Ray Neutron fron 9 5/8" casing shoe back to surface.

C. Mud logger on hole below the 13 3/8" casing shoe.

D. No DST's, Sidewall cores TBD.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If H^2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4250± PSI, and Estimated BHT 175°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 38 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The BONE SPRING formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

OGX Resources

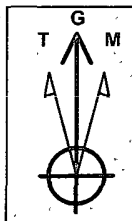
Eddy County
Cooper 29 Fed #1H
Cooper 29 Fed #1H
OH

Plan: Plan #2

Pathfinder X & Y Survey Report

09 February, 2009

OGX Resources



Azimuths to Grid North
True North: -0.17°
Magnetic North: 7.90°

Magnetic Field
Strength: 48793.4snT
Dip Angle: 60.07°
Date: 12/10/2008
Model: IGRF200510

PATHFINDER
ENERGY SERVICES

Project: Eddy County
Site: Cooper 29 Fed #1H
Well: Cooper 29 Fed #1H
Wellbore: OH
Plan: Plan #2 (Cooper 29 Fed #1H/OH)

WELL DETAILS: Cooper 29 Fed #1H

Ground Elevation:: 2937.00
RKB Elevation: Well @ 2949 00ft (JW 1 RKB= 12')
Rig Name: JW 1 RKB= 12'

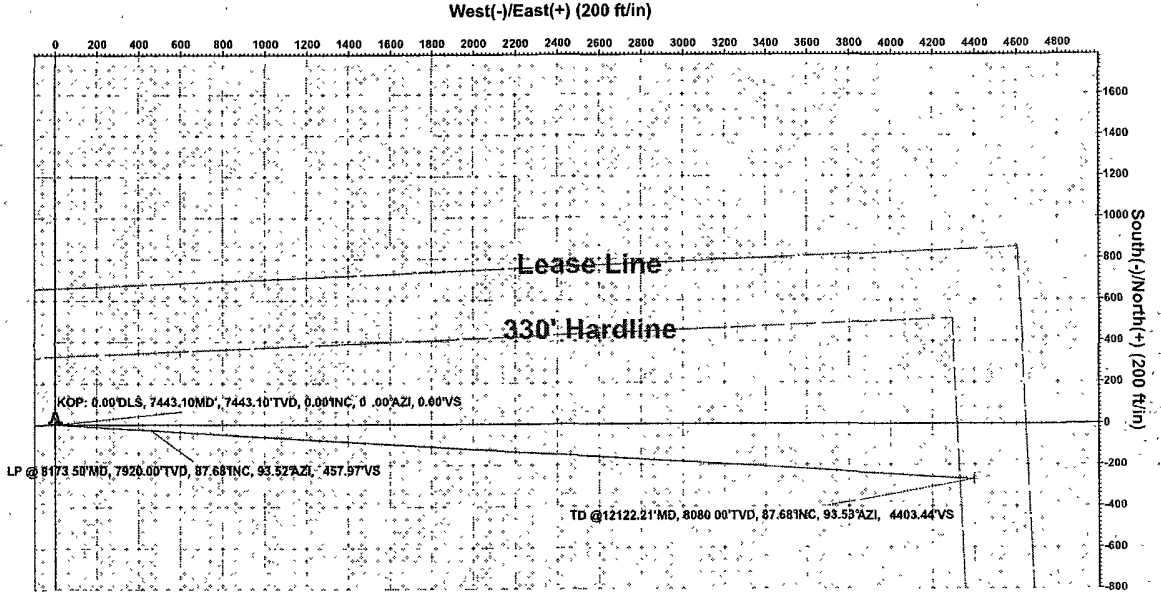
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	400121.900	599269.500	32°5' 58 724 N	104°0' 45 926 W	

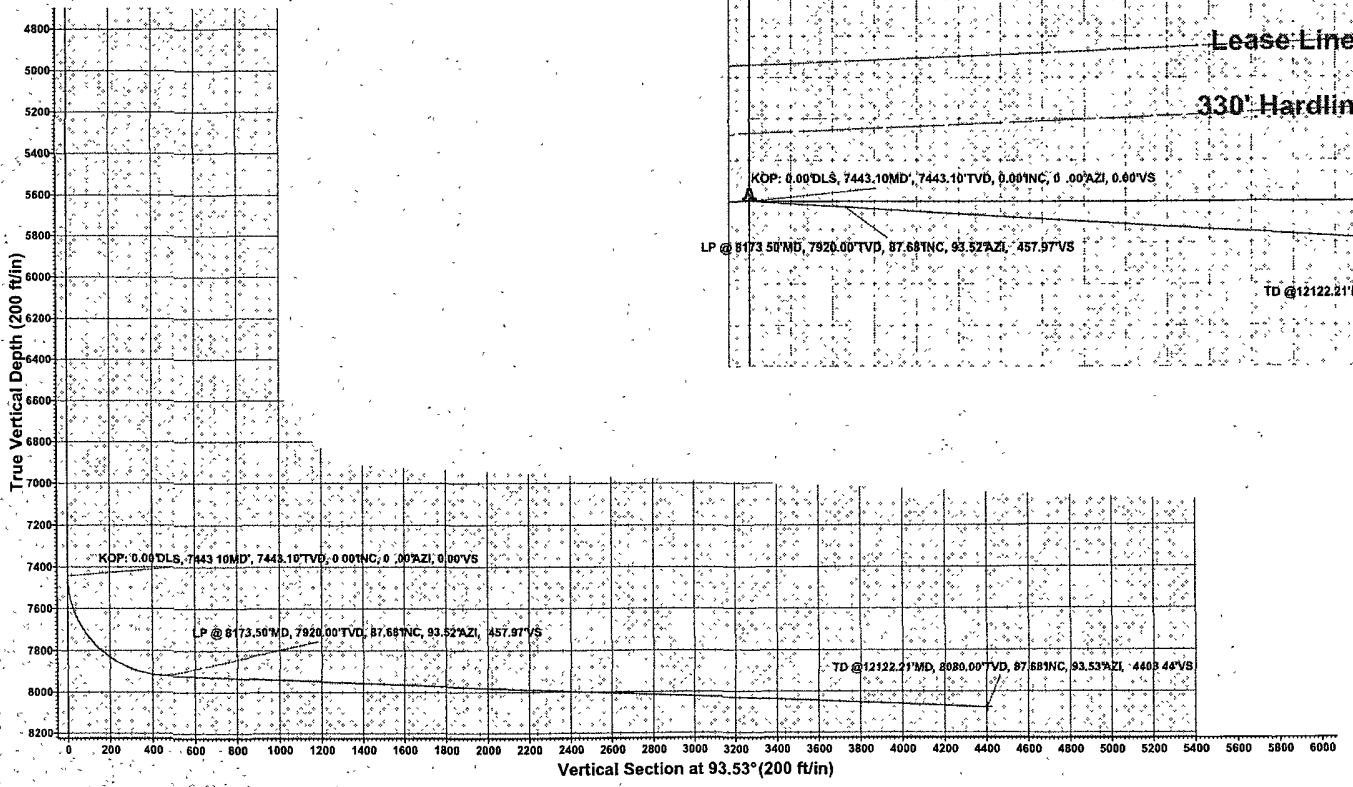
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	
2	7443.10	0.00	0.00	7443.10	0.00	0.00	0 00	0.00	0.00	
3	8173.50	87.68	93.52	7920.00	-28 12	457.11	12 00	93.52	457.97	
4	12122.21	87.68	93 53	8080.00	-270.80	4395.10	0 00	109 18	4403.43	PBHL(Cooper#1)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(Cooper#1)	8080.00	-270.80	4395.10	399851.100	603664.600	Point





PROJECT DETAILS: Eddy County
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Local North: Grid

Plan: Plan #2 (Cooper 29 Fed #1H/OH)

Created By Aaron Pullin Date 8 54, February 09 2009

Checked _____ Date _____

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Project Eddy County, New Mexico

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Cooper 29 Fed #1H

Site Position:		**Northing:**	400,121.900 ft	**Latitude:**	32° 5' 58.724 N
From:	Map	**Easting:**	599,269.500 ft	**Longitude:**	104° 0' 45.926 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.17 °

Well Cooper 29 Fed #1H

Well Position	**+N/-S**	0.00 ft	**Northing:**	400,121.900 ft	**Latitude:**	32° 5' 58.724 N
	+E/-W	0.00 ft	**Easting:**	599,269.500 ft	**Longitude:**	104° 0' 45.926 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	2,937.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/10/2008	8.07	60.07	48,793

Design Plan #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	93.53

Survey Tool Program **Date** 2/9/2009

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	12,122.21	Plan #2 (OH)	MWD	MWD - Standard

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
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Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
0.00	0.00	0.00	0.00	-2,949.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
100.00	0.00	0.00	100.00	-2,849.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
200.00	0.00	0.00	200.00	-2,749.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
300.00	0.00	0.00	300.00	-2,649.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
400.00	0.00	0.00	400.00	-2,549.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
500.00	0.00	0.00	500.00	-2,449.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
600.00	0.00	0.00	600.00	-2,349.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
700.00	0.00	0.00	700.00	-2,249.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
800.00	0.00	0.00	800.00	-2,149.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
900.00	0.00	0.00	900.00	-2,049.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,000.00	0.00	0.00	1,000.00	-1,949.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,100.00	0.00	0.00	1,100.00	-1,849.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,200.00	0.00	0.00	1,200.00	-1,749.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,300.00	0.00	0.00	1,300.00	-1,649.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,400.00	0.00	0.00	1,400.00	-1,549.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,500.00	0.00	0.00	1,500.00	-1,449.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,600.00	0.00	0.00	1,600.00	-1,349.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,700.00	0.00	0.00	1,700.00	-1,249.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,800.00	0.00	0.00	1,800.00	-1,149.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
1,900.00	0.00	0.00	1,900.00	-1,049.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,000.00	0.00	0.00	2,000.00	-949.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,100.00	0.00	0.00	2,100.00	-849.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,200.00	0.00	0.00	2,200.00	-749.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,300.00	0.00	0.00	2,300.00	-649.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,400.00	0.00	0.00	2,400.00	-549.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,500.00	0.00	0.00	2,500.00	-449.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,600.00	0.00	0.00	2,600.00	-349.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
2,700.00	0.00	0.00	2,700.00	-249.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,800.00	0.00	0.00	2,800.00	-149.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
2,900.00	0.00	0.00	2,900.00	-49.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,000.00	0.00	0.00	3,000.00	51.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,100.00	0.00	0.00	3,100.00	151.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,200.00	0.00	0.00	3,200.00	251.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,300.00	0.00	0.00	3,300.00	351.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,400.00	0.00	0.00	3,400.00	451.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,500.00	0.00	0.00	3,500.00	551.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,600.00	0.00	0.00	3,600.00	651.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,700.00	0.00	0.00	3,700.00	751.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,800.00	0.00	0.00	3,800.00	851.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
3,900.00	0.00	0.00	3,900.00	951.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,000.00	0.00	0.00	4,000.00	1,051.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,100.00	0.00	0.00	4,100.00	1,151.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,200.00	0.00	0.00	4,200.00	1,251.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,300.00	0.00	0.00	4,300.00	1,351.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,400.00	0.00	0.00	4,400.00	1,451.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,500.00	0.00	0.00	4,500.00	1,551.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,600.00	0.00	0.00	4,600.00	1,651.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,700.00	0.00	0.00	4,700.00	1,751.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,800.00	0.00	0.00	4,800.00	1,851.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
4,900.00	0.00	0.00	4,900.00	1,951.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,000.00	0.00	0.00	5,000.00	2,051.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,100.00	0.00	0.00	5,100.00	2,151.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,200.00	0.00	0.00	5,200.00	2,251.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,300.00	0.00	0.00	5,300.00	2,351.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,400.00	0.00	0.00	5,400.00	2,451.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,500.00	0.00	0.00	5,500.00	2,551.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,600.00	0.00	0.00	5,600.00	2,651.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,700.00	0.00	0.00	5,700.00	2,751.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,800.00	0.00	0.00	5,800.00	2,851.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
5,900.00	0.00	0.00	5,900.00	2,951.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,000.00	0.00	0.00	6,000.00	3,051.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,100.00	0.00	0.00	6,100.00	3,151.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,200.00	0.00	0.00	6,200.00	3,251.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,300.00	0.00	0.00	6,300.00	3,351.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,400.00	0.00	0.00	6,400.00	3,451.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,500.00	0.00	0.00	6,500.00	3,551.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,600.00	0.00	0.00	6,600.00	3,651.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,700.00	0.00	0.00	6,700.00	3,751.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,800.00	0.00	0.00	6,800.00	3,851.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
6,900.00	0.00	0.00	6,900.00	3,951.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
7,000.00	0.00	0.00	7,000.00	4,051.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
7,100.00	0.00	0.00	7,100.00	4,151.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
7,200.00	0.00	0.00	7,200.00	4,251.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
7,300.00	0.00	0.00	7,300.00	4,351.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
7,400.00	0.00	0.00	7,400.00	4,451.00	0.00	0.00	0.00	0.00	400,121.90	599,269.50
7,443.10	0.00	0.00	7,443.10	4,494.10	0.00	0.00	0.00	0.00	400,121.90	599,269.50
KOP: 0.00°DLS, 7443.10MD', 7443.10'TVD, 0.00°INC, 0.00°AZI, 0.00'VS										
7,450.00	0.83	93.52	7,450.00	4,501.00	0.00	0.05	0.05	12.00	400,121.90	599,269.55
7,475.00	3.83	93.52	7,474.98	4,525.98	-0.07	1.06	1.07	12.00	400,121.83	599,270.56
7,500.00	6.83	93.52	7,499.87	4,550.87	-0.21	3.38	3.39	12.00	400,121.69	599,272.88
7,525.00	9.83	93.52	7,524.60	4,575.60	-0.43	7.00	7.01	12.00	400,121.47	599,276.50

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
7,550.00	12.83	93.52	7,549.11	4,600.11	-0.73	11.90	11.92	12.00	400,121.17	599,281.40
7,575.00	15.83	93.52	7,573.33	4,624.33	-1.11	18.08	18.11	12.00	400,120.79	599,287.58
7,600.00	18.83	93.52	7,597.19	4,648.19	-1.57	25.51	25.56	12.00	400,120.33	599,295.01
7,625.00	21.84	93.52	7,620.63	4,671.63	-2.10	34.18	34.24	12.00	400,119.80	599,303.68
7,650.00	24.84	93.52	7,643.58	4,694.58	-2.71	44.06	44.15	12.00	400,119.19	599,313.56
7,675.00	27.84	93.52	7,665.98	4,716.98	-3.39	55.13	55.24	12.00	400,118.51	599,324.63
7,700.00	30.84	93.52	7,687.77	4,738.77	-4.14	67.36	67.48	12.00	400,117.76	599,336.86
7,725.00	33.84	93.52	7,708.89	4,759.89	-4.96	80.70	80.86	12.00	400,116.94	599,350.20
7,750.00	36.84	93.52	7,729.28	4,780.28	-5.85	95.14	95.32	12.00	400,116.05	599,364.64
7,775.00	39.84	93.52	7,748.89	4,799.89	-6.80	110.61	110.82	12.00	400,115.10	599,380.11
7,800.00	42.84	93.52	7,767.66	4,818.66	-7.82	127.09	127.34	12.00	400,114.08	599,396.59
7,825.00	45.84	93.52	7,785.53	4,836.53	-8.89	144.53	144.81	12.00	400,113.01	599,414.03
7,850.00	48.85	93.52	7,802.47	4,853.47	-10.02	162.88	163.19	12.00	400,111.88	599,432.38
7,875.00	51.85	93.52	7,818.42	4,869.42	-11.20	182.09	182.44	12.00	400,110.70	599,451.59
7,900.00	54.85	93.52	7,833.35	4,884.35	-12.43	202.11	202.49	12.00	400,109.47	599,471.61
7,925.00	57.85	93.52	7,847.20	4,898.20	-13.71	222.88	223.30	12.00	400,108.19	599,492.38
7,950.00	60.85	93.52	7,859.94	4,910.94	-15.03	244.34	244.80	12.00	400,106.87	599,513.84
7,975.00	63.85	93.52	7,871.54	4,922.54	-16.39	266.44	266.95	12.00	400,105.51	599,535.94
8,000.00	66.85	93.52	7,881.97	4,932.97	-17.78	289.12	289.67	12.00	400,104.12	599,558.62
8,025.00	69.85	93.52	7,891.19	4,942.19	-19.21	312.31	312.90	12.00	400,102.69	599,581.81
8,050.00	72.85	93.52	7,899.18	4,950.18	-20.67	335.95	336.59	12.00	400,101.23	599,605.45
8,075.00	75.86	93.52	7,905.92	4,956.92	-22.14	359.98	360.66	12.00	400,099.76	599,629.48
8,100.00	78.86	93.52	7,911.39	4,962.39	-23.64	384.32	385.05	12.00	400,098.26	599,653.82
8,125.00	81.86	93.52	7,915.58	4,966.58	-25.15	408.92	409.69	12.00	400,096.75	599,678.42
8,150.00	84.86	93.52	7,918.47	4,969.47	-26.68	433.70	434.52	12.00	400,095.22	599,703.20
8,173.50	87.68	93.52	7,920.00	4,971.00	-28.12	457.11	457.97	12.00	400,093.78	599,726.61

LP @ 8173.50'MD, 7920.00'TVD, 87.68°INC, 93.52°AZI, 457.97'VS

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,200.00	87.68	93.52	7,921.07	4,972.07	-29.74	483.53	484.45	0.00	400,092.16	599,753.03
8,300.00	87.68	93.52	7,925.12	4,976.12	-35.88	583.26	584.37	0.00	400,086.02	599,852.76
8,400.00	87.68	93.52	7,929.17	4,980.17	-42.01	682.99	684.28	0.00	400,079.89	599,952.49
8,500.00	87.68	93.52	7,933.22	4,984.22	-48.15	782.72	784.20	0.00	400,073.75	600,052.22
8,600.00	87.68	93.52	7,937.27	4,988.27	-54.29	882.45	884.12	0.00	400,067.61	600,151.95
8,700.00	87.68	93.52	7,941.32	4,992.32	-60.42	982.18	984.04	0.00	400,061.48	600,251.68
8,800.00	87.68	93.52	7,945.36	4,996.36	-66.56	1,081.91	1,083.96	0.00	400,055.34	600,351.41
8,900.00	87.68	93.52	7,949.41	5,000.41	-72.70	1,181.64	1,183.87	0.00	400,049.20	600,451.14
9,000.00	87.68	93.52	7,953.46	5,004.46	-78.84	1,281.37	1,283.79	0.00	400,043.06	600,550.87
9,100.00	87.68	93.52	7,957.51	5,008.51	-84.98	1,381.10	1,383.71	0.00	400,036.92	600,650.60
9,200.00	87.68	93.52	7,961.56	5,012.56	-91.12	1,480.83	1,483.63	0.00	400,030.78	600,750.33
9,300.00	87.68	93.52	7,965.61	5,016.61	-97.26	1,580.56	1,583.55	0.00	400,024.64	600,850.06
9,400.00	87.68	93.52	7,969.66	5,020.66	-103.40	1,680.28	1,683.46	0.00	400,018.50	600,949.78
9,500.00	87.68	93.52	7,973.71	5,024.71	-109.54	1,780.01	1,783.38	0.00	400,012.36	601,049.51
9,600.00	87.68	93.52	7,977.77	5,028.77	-115.69	1,879.74	1,883.30	0.00	400,006.21	601,149.24
9,700.00	87.68	93.52	7,981.82	5,032.82	-121.83	1,979.47	1,983.22	0.00	400,000.07	601,248.97
9,800.00	87.68	93.53	7,985.87	5,036.87	-127.97	2,079.20	2,083.13	0.00	399,993.93	601,348.70
9,900.00	87.68	93.53	7,989.92	5,040.92	-134.12	2,178.93	2,183.05	0.00	399,987.78	601,448.43
10,000.00	87.68	93.53	7,993.97	5,044.97	-140.26	2,278.66	2,282.97	0.00	399,981.64	601,548.16
10,100.00	87.68	93.53	7,998.02	5,049.02	-146.41	2,378.39	2,382.89	0.00	399,975.49	601,647.89
10,200.00	87.68	93.53	8,002.07	5,053.07	-152.55	2,478.12	2,482.81	0.00	399,969.35	601,747.62
10,300.00	87.68	93.53	8,006.13	5,057.13	-158.70	2,577.84	2,582.72	0.00	399,963.20	601,847.34
10,400.00	87.68	93.53	8,010.18	5,061.18	-164.85	2,677.57	2,682.64	0.00	399,957.05	601,947.07
10,500.00	87.68	93.53	8,014.23	5,065.23	-170.99	2,777.30	2,782.56	0.00	399,950.91	602,046.80
10,600.00	87.68	93.53	8,018.28	5,069.28	-177.14	2,877.03	2,882.48	0.00	399,944.76	602,146.53
10,700.00	87.68	93.53	8,022.34	5,073.34	-183.29	2,976.76	2,982.40	0.00	399,938.61	602,246.26
10,800.00	87.68	93.53	8,026.39	5,077.39	-189.44	3,076.49	3,082.31	0.00	399,932.46	602,345.99

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,900.00	87.68	93.53	8,030.44	5,081.44	-195.59	3,176.21	3,182.23	0.00	399,926.31	602,445.71
11,000.00	87.68	93.53	8,034.50	5,085.50	-201.74	3,275.94	3,282.15	0.00	399,920.16	602,545.44
11,100.00	87.68	93.53	8,038.55	5,089.55	-207.89	3,375.67	3,382.07	0.00	399,914.01	602,645.17
11,200.00	87.68	93.53	8,042.60	5,093.60	-214.04	3,475.40	3,481.98	0.00	399,907.86	602,744.90
11,300.00	87.68	93.53	8,046.66	5,097.66	-220.20	3,575.13	3,581.90	0.00	399,901.70	602,844.63
11,400.00	87.68	93.53	8,050.71	5,101.71	-226.35	3,674.86	3,681.82	0.00	399,895.55	602,944.36
11,500.00	87.68	93.53	8,054.77	5,105.77	-232.50	3,774.58	3,781.74	0.00	399,889.40	603,044.08
11,600.00	87.68	93.53	8,058.82	5,109.82	-238.66	3,874.31	3,881.66	0.00	399,883.24	603,143.81
11,700.00	87.68	93.53	8,062.88	5,113.88	-244.81	3,974.04	3,981.57	0.00	399,877.09	603,243.54
11,800.00	87.68	93.53	8,066.93	5,117.93	-250.96	4,073.77	4,081.49	0.00	399,870.94	603,343.27
11,900.00	87.68	93.53	8,070.99	5,121.99	-257.12	4,173.50	4,181.41	0.00	399,864.78	603,443.00
12,000.00	87.68	93.53	8,075.04	5,126.04	-263.28	4,273.22	4,281.33	0.00	399,858.62	603,542.72
12,100.00	87.68	93.53	8,079.10	5,130.10	-269.43	4,372.95	4,381.24	0.00	399,852.47	603,642.45
12,122.21	87.68	93.53	8,080.00	5,131.00	-270.80	4,395.10	4,403.43	0.00	399,851.10	603,664.60

TD @12122.21'MD, 8080.00'TVD, 87.68°INC, 93.53°AZI, 4403.44'VS - PBHL(Cooper#1)

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	**Local Co-ordinate Reference:**	Well Cooper 29 Fed #1H
Project:	Eddy County	**TVD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Site:	Cooper 29 Fed #1H	**MD Reference:**	Well @ 2949.00ft (JW 1 RKB= 12')
Well:	Cooper 29 Fed #1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	EDM 2003.16 Single User Db

Targets

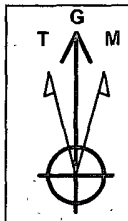
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(Cooper#1) - plan hits target - Point	0.00	357.35	8,080.00	-270.80	4,395.10	399,851.100	603,664.600	32° 5' 55.912 N	103° 59' 54.840 W

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
7,443.10	7,443.10	0.00	0.00	KOP: 0.00°DLS, 7443.10MD', 7443.10'TVD, 0.00°INC, 0.00°AZI, 0.00'\
8,173.50	7,920.00	-28.12	457.11	LP @ 8173.50'MD, 7920.00'TVD, 87.68°INC, 93.52°AZI, 457.97'VS
12,122.21	8,080.00	-270.80	4,395.10	TD @12122.21'MD, 8080.00'TVD, 87.68°INC, 93.53°AZI, 4403.44'VS

Checked By: _____ Approved By: _____ Date: _____

OGX Resources



Azimuths to Grid North
True North: -0.17°
Magnetic North: 7.90°

Magnetic Field
Strength: 48793.4snT
Dip Angle: 60.07°
Date: 12/10/2008
Model: IGRF200510

PATHFINDER
ENERGY SERVICES

Project: Eddy County
Site: Cooper 29 Fed #1H
Well: Cooper 29 Fed #1H
Wellbore: OH
Plan: Plan #2 (Cooper 29 Fed #1H/OH)

WELL DETAILS: Cooper 29 Fed #1H

Ground Elevation:: 2937.00
RKB Elevation: Well @ 2949.00ft (JW 1 RKB= 12')
Rig Name JW 1 RKB= 12'

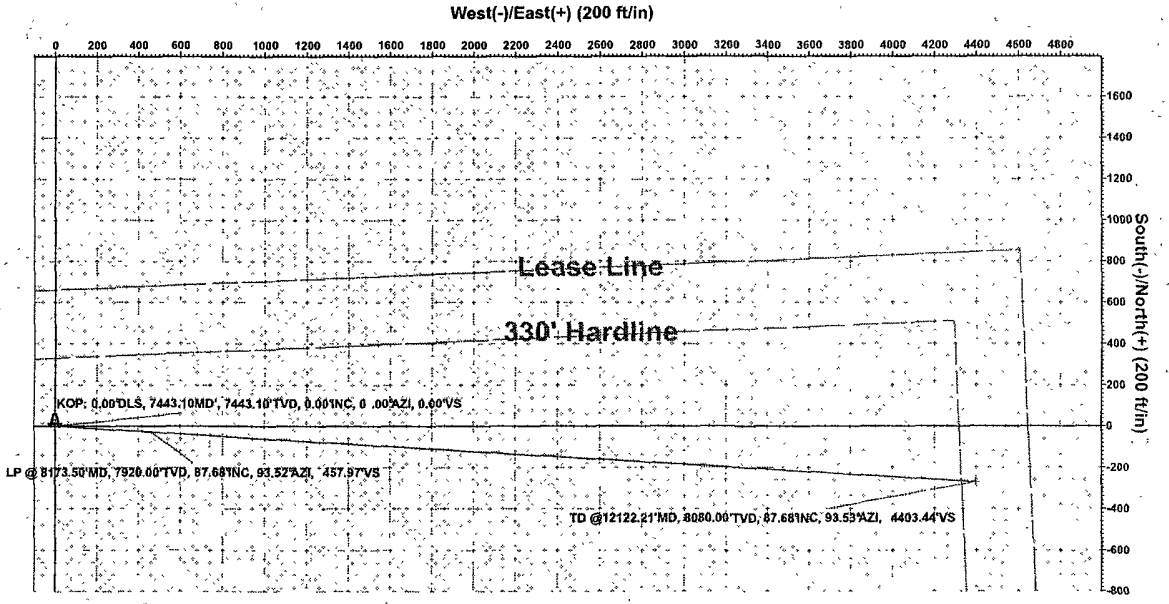
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	400121.900	599269.500	32°5' 58.724 N	104°0' 45.926 W	

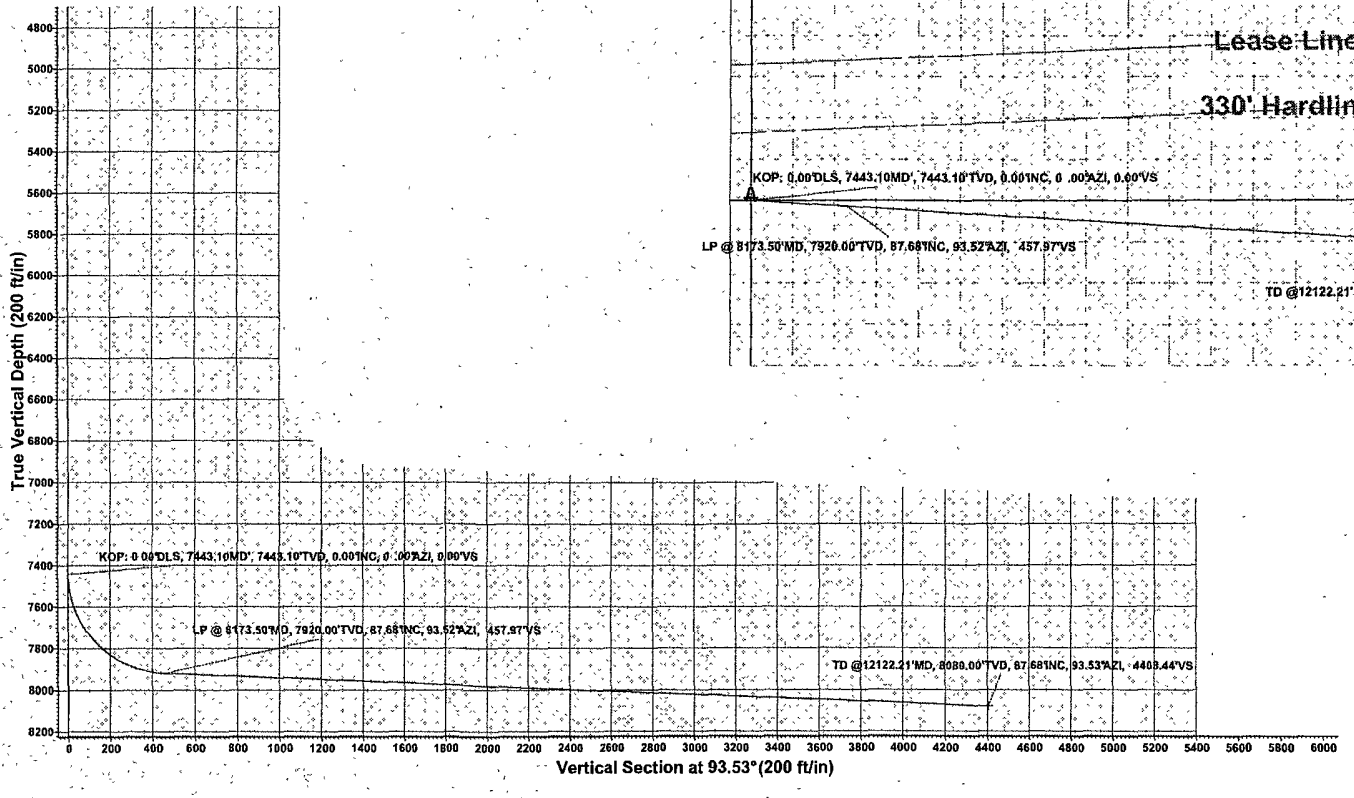
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	7443.10	0.00	0.00	7443.10	0.00	0.00	0.00	0.00	0.00	
3	8173.50	87.68	93.52	7920.00	-28.12	457.11	12.00	93.52	457.97	
4	12122.21	87.68	93.53	8080.00	-270.80	4395.10	0.00	109.18	4403.43	PBHL(Cooper#1)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(Cooper#1)	8080.00	-270.80	4395.10	399851.100	603664.600	Point





PROJECT DETAILS. Eddy County
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Local North: Grid

Plan Plan #2 (Cooper 29 Fed #1H/OH)
Created By Aaron Pullin Date 8 54, February 09 2009
Checked _____ Date _____

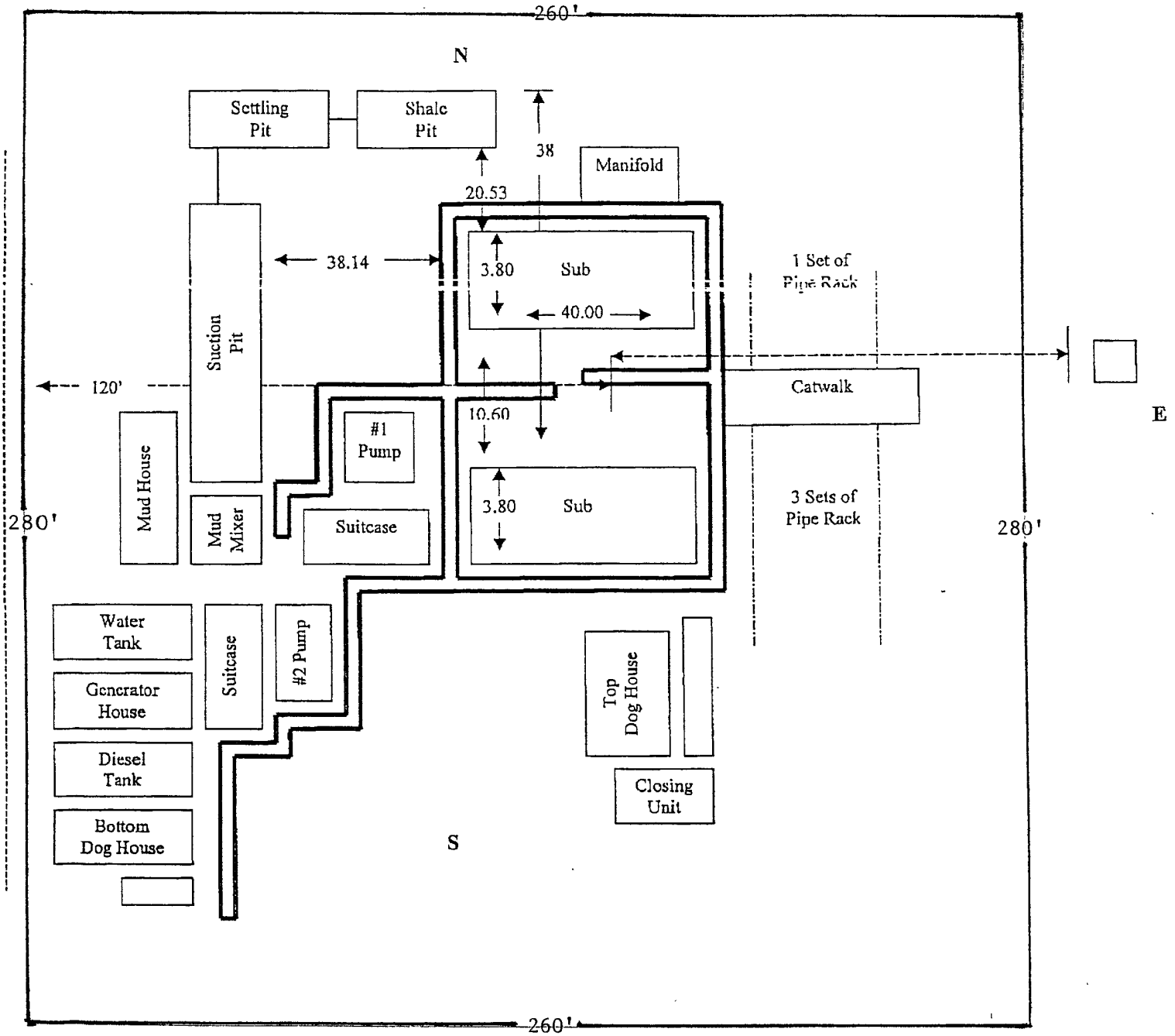
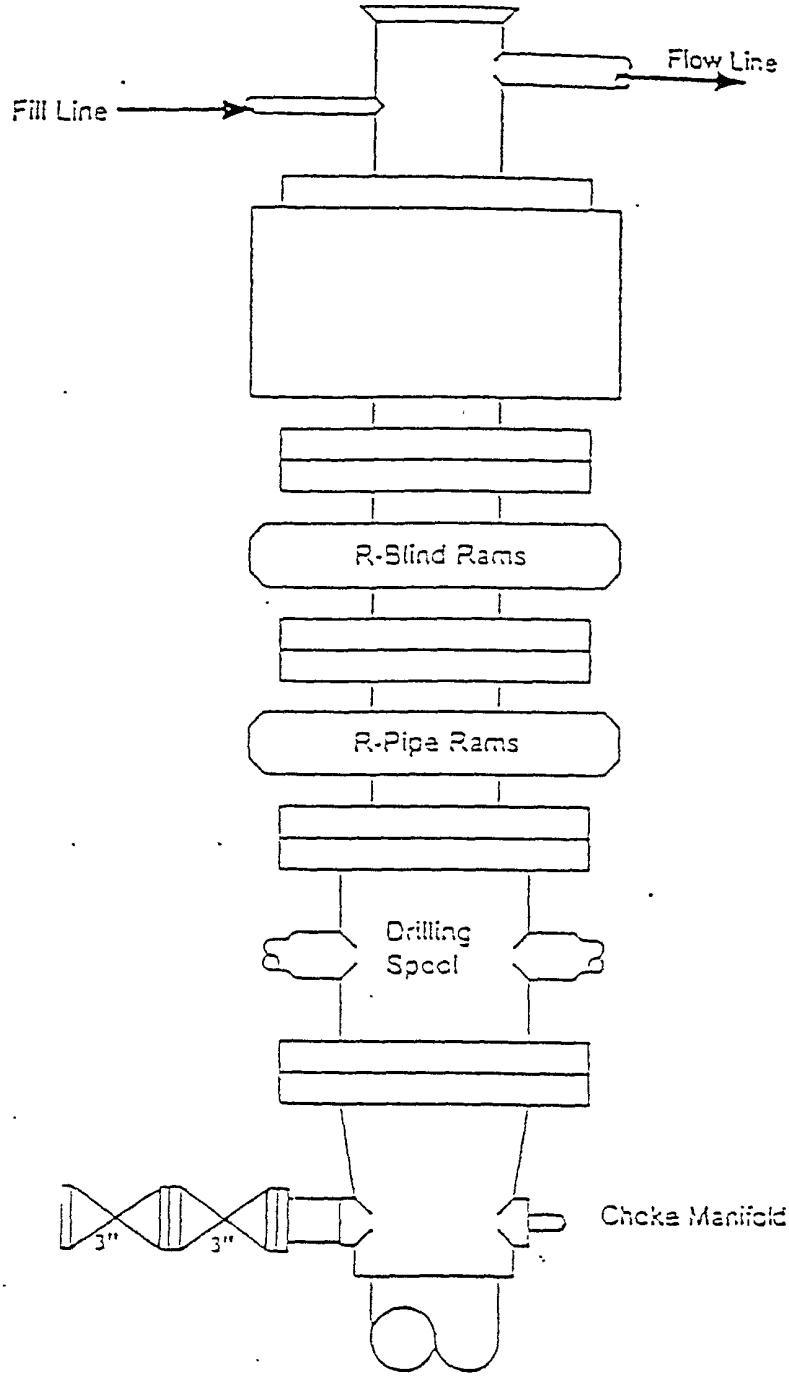


EXHIBIT "D"
RIG LAY OUT PLAT

GGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29



Type 900 Series
3000 psi WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

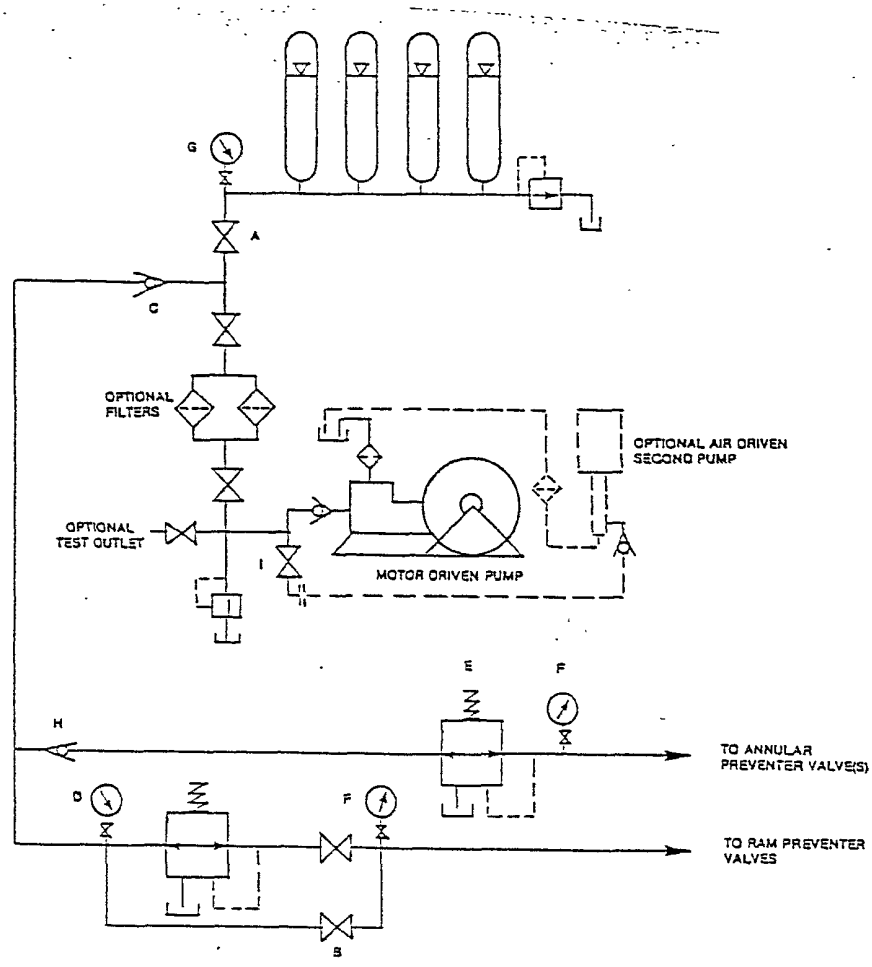


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

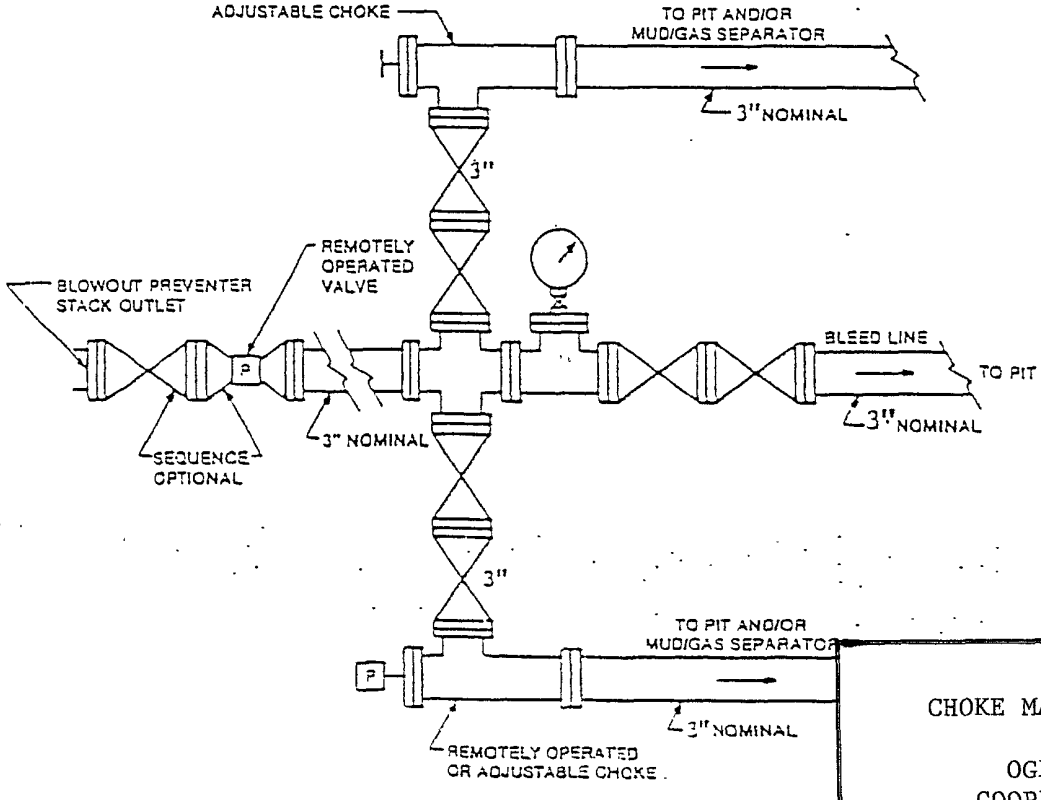


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLE & CLOSING UNIT

OGX RESOURCES, LLC.
COOPER "29" FEDERAL # 1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN
FOR DRILLING/WORKOVER/FACILITY

This well and its anticipated facility are not expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. There are no Private residences in the area but a contingency plan has been orchestrated. OGX RESOURCES, LLC. Will have a company representative available to rig personnel throughout drilling or production operations. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be acquired for monitoring and/or testing.

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN
FOR DRILLING/WORKOVER/FACILITY

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OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

General H2S Emergency Actions:

1. All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area".
2. If for any reason a person must enter the hazardous area, they must wear a SCBA (Self Contained Breathing Apparatus).
3. Always use the "buddy system"
4. Isolate the well/problem if possible
5. Account for all personnel
6. Display the proper colors warning all unsuspecting personnel of the danger at hand.
7. Contact the Company personnel as soon as possible if not at the location (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of the emergency response agencies and nearby residents.

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S

1. All personnel will don the self contained breathing apparatus
2. Remove all personnel to the "safe area" (always use the buddy system)
3. Contact company personnel if not on location]
4. Set in motion the steps to protect and or remove the general public to and upwind "safe area" Maintain strict security & safety procedures while dealing with the source.
5. No entry to any unauthorized personnel
6. Notify the appropriate agencies: City Police – City Street(s)
   State Police – State Rd.
   County Sheriff – County Rd.
7. Call the NMOCD

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN
FOR DRILLING/WORKOVER/FACILITY

If at this time the supervising person determines the release of H2S cannot be contained to the site location and the general public is in harms way he will take the necessary steps to protect the workers and the public.
EMERGENCY CALL LIST: (Start and continue until ONE of these people has been contacted)

	OFFICE	MOBILE	HOME
Jeff Birkelbach	432-685-1287	432-694-7880	432-553-0391
Donny Leek		432-634-4862	432-399-4489
JW Drilling Co	575-748-8704	575-513-2415 575-513-0321	

State Police	Eddy County		575 -748-9718
State Police	Lea County		575-392-5588
Sheriff	Eddy County		575-746-2701
Sheriff	Lea County		
Emergency Medical Service (Ambulance)	Eddy County		911 or 575-746-2701
	Lea County	Eunice	911 or 575-394-3258
Emergency Response	Eddy County SERC		575-476-9620
	Lea County		
Artesia Police Dept			575-746-5001
Artesia Fire Dept			575-746-5001
Carlsbad Police Dept			575-885-2111
Carlsbad Fire Dept			575-885-3125

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN
FOR DRILLING/WORKOVER/FACILITY

EMERGENCY CALL LIST (CONT.)

Loco Hills Police Dept		575-677-2349
Jal Police Dept		575-395-2501
Jal Fire Dept		575-395-2221
Jal Ambulance		575-395-2221
Eunice Police Dept		575-394-0112
Eunice Fire Dept		575-394-3258
Eunice Ambulance		575-394-3258
Hobbs Police Dept		575-397-3365
Hobbs Fire Dept		575-397-9308
NMOCD	District 1 (Lea, Roosevelt, Curry)	575-393-6161
	District 2 (Eddy, Chavez)	575-748-1283
Lea County Information		575-393-8203
Callaway Safety	Eddy/Lea Counties	575-392-2973
BJ Services	Artesia	575-746-3140
	Hobbs	575-392-5556
Halliburton	Artesia	1-800-523-2482
	Hobbs	1-800-523-2482
Wild Well Control	Midland	432-550-6202
	Mobile	432-553-1166

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN
FOR DRILLING/WORKOVER/FACILITY

PROTECTION OF THE GENERAL PUBLIC (ROE)

- 100 ppm at any public area (any place not associated with this site)
- 500 ppm at any public road (any road with the general public may travel)
- 100 ppm radius of ¼ mile in New Mexico will be assumed if there is insufficient data to do the calculations, and there is a reasonable expectation that H2S could be present in concentrations greater than 100 ppm in the gas mixture

CALCULATIONS FOR THE 100 PPM (ROE) "PASQUILL-GIFFORD EQUATION"

X = [(1.589) (mole fraction) (Q-volume in std cu ft)] to the power of (0.6258)

CALCULATION FOR THE 500 PPM ROE:

X = [(.4546) (mole fraction) (Q – volume in std cu ft)] to the power of (0.6258)

Example:

If a well/facility has been determined to have 150 / 500 ppm H2S in the gas mixture and the well/facility is producing at a gas rate of 100 MCFPD then:

150 ppm X = [(1.589) (.00015) (100,000 cfd)] to the power of (.6258)
X = 7 ft.

500 ppm X = [(.4546) (.0005) (100,000 cfd)] to the power of (.6258)
X = 3.3 ft.

(These calculations will be forwarded to the appropriate District NMOCD office when Applicable)

PUBLIC EVACUATION PLAN:

- Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures.
- A trained person in H2S safety shall monitor with detection equipment the H2S concentration, wind and area exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. **(All monitoring equipment shall be UL approved, for use in class 1 groups A, B, C & D, Division 1, hazardous locations. All monitor will have a minimum capability of measuring H2S, oxygen and flammable values.)**

- Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.

- The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

PROCEDURE FOR IGNITING AN UNCONTROLABLE CONDITION:

1. Human life and/or property are in danger.

2. There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTION FOR IGNITION:

1. Two people are required. They must be equipped with positive pressure, self contained breathing apparatus and a "D" ring style full body, OSHA approved safety harness. Non flammable rope will be attached.

2. One of the people will be qualified safety person who will test the atmosphere for H2S, oxygen and LFL. The other person will be the company supervisor; he is responsible for igniting the well.

3. Ignite up wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25 mm flare gun shall be used, with a ± 500 ft. range to ignite the gas.

4. Prior to ignition, make a final check with combustible gases.

5. Following ignition, continue with the emergency actions & procedures as before.

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

REQUIRED EMERGENCY EQUIPMENT:

1. **Breathing apparatus:**
   - Rescue packs (SCBA) – 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
   - Work/Escape packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
   - Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.

2. **Signage & Flagging:**
   - One color code condition sign will be placed at the entrance to the site reflection the possible conditions at the site.
   - A colored conditioned flag will be on display, reflecting the condition at the site at the time.

3. **Briefing Area:**
   - Two perpendicular areas will be designated by signs and readily accessible.

4. **Wind Socks:**
   - Two windsocks will be placed in strategic locations, visible from all angles.

5. **H2S Detectors & Alarms:**
   - The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible at 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: (Gas sample tubes will be stored in the safety trailer)
     - Rig Floor
     - Bell Nipple
     - End of flow line or where well bore fluid are being discharged.

6. **Auxiliary Rescue Equipment:**
   - Stretcher
   - Two OSHA full body harness
   - 100 ft. 5/8 inch OSHA approved rope.
   - 1 – 20# class ABC fire extinguisher
   - Communication via cell phones on location and vehicles on location.

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

USING SELF CONTAINED BREATHING AIR EQUIPMENT (SCBA):

- (SCBA) SHOULD BE WORN WHEN ANY OF THE FOLLOWING ARE PERFORMED:
    - Working near the top or on the top of a tank
    - Disconnecting any line where H2S can reasonably be expected
    - Sampling air in the area to determine if toxic concentration of H2S can exist.
    - Working in areas where over 10 ppm on H2S has been detected.
    - At any time there is a doubt as the level of H2S in the area.
- All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location.
- Facial hair and standard eyeglasses are not allowed with SCBA.
- Contact lenses are never allowed with SCBA.
- Air quality shall be continuously checked during the entire operation.
- After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected.
- All SCBA shall be inspected monthly.

RESCUE AND FIRST AID FOR VICTIMS OF HYDROGEN SULFIDE (H2S) POISONING:

- Do not panic
- Remain calm and think
- Get on the breathing apparatus

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

- Remove the victim to the safe breathing area as quickly as possible. Up wind and uphill from source or cross wind to achieve upwind.
- Notify emergency response personnel.
- Provide artificial respiration and or CPR, as necessary.
- Remove all contaminated clothing to avoid further exposure.
- A minimum of two personnel on location shall be trained in CPR and First Aid.

OGX RESOURCES, LLC.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

H2S is extremely toxic. The acceptable ceiling for eight hours of exposure is 10 ppm, which is .001% by volume. H2S is approximately 20% heavier than air (Sp. Gr = 1.19) (Air = 1) and colorless. It forms an explosive mixture with air between 4.3% and 46%. By volume hydrogen sulfide is almost as toxic as hydrogen cyanide and is 5-6 times more toxic than carbon monoxide.

COMMON NAME	CHEMICAL ABBREV.	SPECIFIC GRVTY.	THRESHOLD LIMITS	HAZARDOUS LIMITS	LETHAL CONCENTRATIONS
Hydrogen Sulfide	H2S	1.19	10 ppm 15 ppm	100 ppm/hr	600ppm
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Sulfur Dioxide	SO2	2.21	2 ppm	N/A	1000 ppm
Chlorine	CL2	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO2	1.52	5000 ppm	5%	10%
Methane	CH4	0.55	90,000	Combustible @ 5%	N/A

Threshold Limit: Concentrations at which it is believed that all workers may be repeatedly exposed, day after day without adverse effects.

Hazardous Limit: Concentrations that may cause death.

Concentrations: Concentrations that will cause death with short term exposure.

Threshold Limit: NIOSH guide to chemical hazards
(10 ppm)

PHYSICAL EFFECTS OF HYDROGEN SULFIDE:

CONCENTRATION		*PHYSICAL EFFECTS*
.001%	10 ppm	Obvious and unpleasant odor. Safe for 8 hr. exposure
.005%	50 ppm	Can cause some flu like symptoms and can cause pneumonia.
.01%	100 ppm	Kills the sense of smell in 3-15 minutes. May irritate the eyes and throat.
.02%	200 ppm	Kills the sense of smell rapidly. Severely irritates the eyes and throat. Severe flu-like symptoms after 4 or more hours. May cause lung damage and or death.
.06%	600 ppm	Loss of consciousness quickly, death will result if not rescued promptly.

SURFACE USE PLAN

OGX RESOURCES, LLC.
COOPER "29" FEDERAL #1H
UNIT "L" SECTION 29
T25S-R29E EDDY CO. NM

1. EXISTING AND PROPOSED ROADS:

A. Exhibit "B" is a reporduction of a County General Hi-way map showing existing roads. Exhibit "C" is a reproduction of a USGS topographic map showing existing roads and and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. All new roads will be constructed to BLM specifications.

B. Exhibit "A" shows the proposed well site as staked.

C. Directions to location: From Malaga New Mexico take U. S. Hi-way 285 South 12.5 miles to CR-725 (White horn road), turn Left (East) go 3.8 miles cross river, continue .2 miles, bear Left (Northeast) go 1.8 miles, turn Left (North) go .25 miles, bear Left follow lease road 1.6 miles, bear Right go .6 miles and location is on the Right Hand side of road.

D. Exhibit "C" shows existing roads and proposed roads.

2. PLANNED ACCESS ROADS: No new roads will be required if two track road is used.

A. The access roads will be crowned and sitched to a 14' wide travel surface, within a 30' R-O-W.

B. Gradient of all roads will be less than 5%.

C. Turn-outs will be constructed where necessary.

D. If require new access roads will be surface with a minimum of 4-6" of caliche. this material will be obtained from a local source.

E. Center line for new roads will be flagged, road construction will be done as field conditions require.

F. Culverts will be placed in the access road as drainage conditions require. Roads will be constructed to use low water crossings for drainage as required by the topographic conditions.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS: EXHIBIT "A-1"

A. Water wells - None known

B. Disposal wells - None known

C. Drilling wells - None known

D. Producing wells - As shown on Exhibit "A-1"

E. Abandoned wells - As shown on Exhibit "A-1"

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "C" shows proposed roads , flowlines and powerlines.

5. LOCATION & TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the location access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of the drill site, if additional material is required it will be obtained from a local source and transported over the location access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE:

A. All trash, junk and other waste material will be contained in trash cages or trash bins in order to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.

B. Sewage from living quaters will be drained into holding tanks and will be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of well.

C. Where a closed loop mud system is used to drill a well the drilling fluid that remains after the drilling and casing is run or the well is Plugged and abandoned will be removed from the location and in some cases may be used on another well or transported to a State approve disposal site. The drilling cuttings that result from drilling the well will likewise be transported to a State approved disposal site.

D. All water produced while completing this well and completion fluids will be treated in the same procedure as the drilling fluids.

E. Any remaining salts or mud additive that was not used will be removed by the supplier, this includes all broken sacks and containers.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on this location.

9. WELL SITE LAYOUT:

A. Exhibit "D" shows the proposed well site layout.

B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.

C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encontered during pit construction indicate that a plastic liner is required to contain lateral migration.

D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 21 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.

E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completionphases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out.If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any will be reshaped to the original configuration with provisions made to alleviate furture erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

Should the well be a producer the previously noted procedures will apply to those areas which are not required for production facilities.

11. OTHER INFORMATION:

A. Topography where the location is is relatively flat with only a slight dip to the Southwest and West, with drainage into the Pecos River. Soil consists or tan sand with caliche cobbles. Vegetation consists of mesquite, desert cactus, and native grasses.

B. The surface and the minerals are owned by The U. S. Department of Interior and is administered by the Bureau of Land Management. The surface is used for the production of Oil & Gas and livestock grazing.

C. An archaeoligical survey will be conducted on the access roads and drilling location and filed with the BLM Carlsbad Field Office in Carlsbad New Mexico.

D. There are no dwellings within 2 miles of location and no known water wells.

CERTIFICATION

I HEREBY CERTIFY THAT I OR PERSONS UNDER MY DIRECT SUPERVISION HAVE INSPECTED THE PROPOSED DRILL SITE AND THE ACCESS ROAD ROUTES, THAT I AM FAMILIAR WITH THE CONDITIONS THAT CURRENTLY EXIST, THAT THE STATEMENTS MADE IN THIS PLAN ARE TO THE BEST OF MY KNOWLEDGE ARE TRUE AND CORRECT, AND THAT THE WORK ASSOCIATED WITH THE OPERATIONS PROPOSED HEREIN WILL BE PERFORMED BY OGX RESOURCES, LLC. ITS CONTRACTORS AND/OR ITS SUB-CONTRACTORS AND IS IN CONFORMANCE WITH THIS PLANS AND TERMS AND THE CONDITIONS UNDER WHICH IT IS APPROVED. THIS STATEMENT IS SUBJECT TO THE PROVISIONS OF U.S.C. FOR FILING A FALSE REPORT.

OPERATOR'S REPRESENTATIVES:

BEFORE CONSTRUCTION	DURING & AFTER CONSTRUCTION
TIERRA EXPLORATION, INC	OGX RESOURCES, LLC.
P. O. BOX 2188	P. O. BOX 2064
HOBBS, NEW MEXICO 88241	MIDLAND, TEXAS 79701
JOE JANICA 575-391-8503	JEFF BIRKELBACH 432-685-1287
CELL 575-390-1598	CELL 432-553-0391

NAME Joe T. Janica Joe T Janica

TITLE Permit Eng.

DATE 12/24/08

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OGX Resources, LLC
LEASE NO.:	NM 100555
WELL NAME & NO.:	Cooper 29 Federal No 1H
SURFACE HOLE FOOTAGE:	2230' FSL & 560' FWL
BOTTOM HOLE FOOTAGE	1980' FSL & 350' FEL
LOCATION:	Section 29, T. 25 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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

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)

Communitization Agreement

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. Plat only shows BHL lease NMNM-100555, SHL lease is NMNM-119756.

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

F. ON LEASE ACCESS ROADS

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

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

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

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

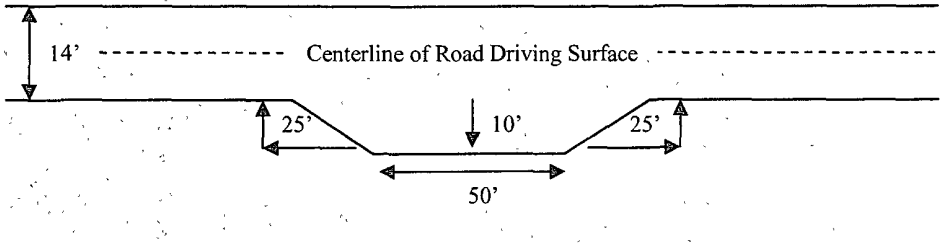
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

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

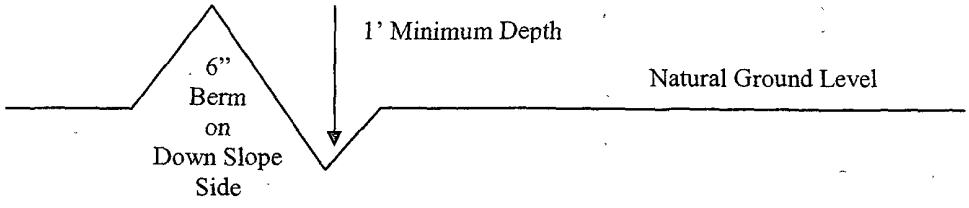
Standard Turnout – Plan View



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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

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

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

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

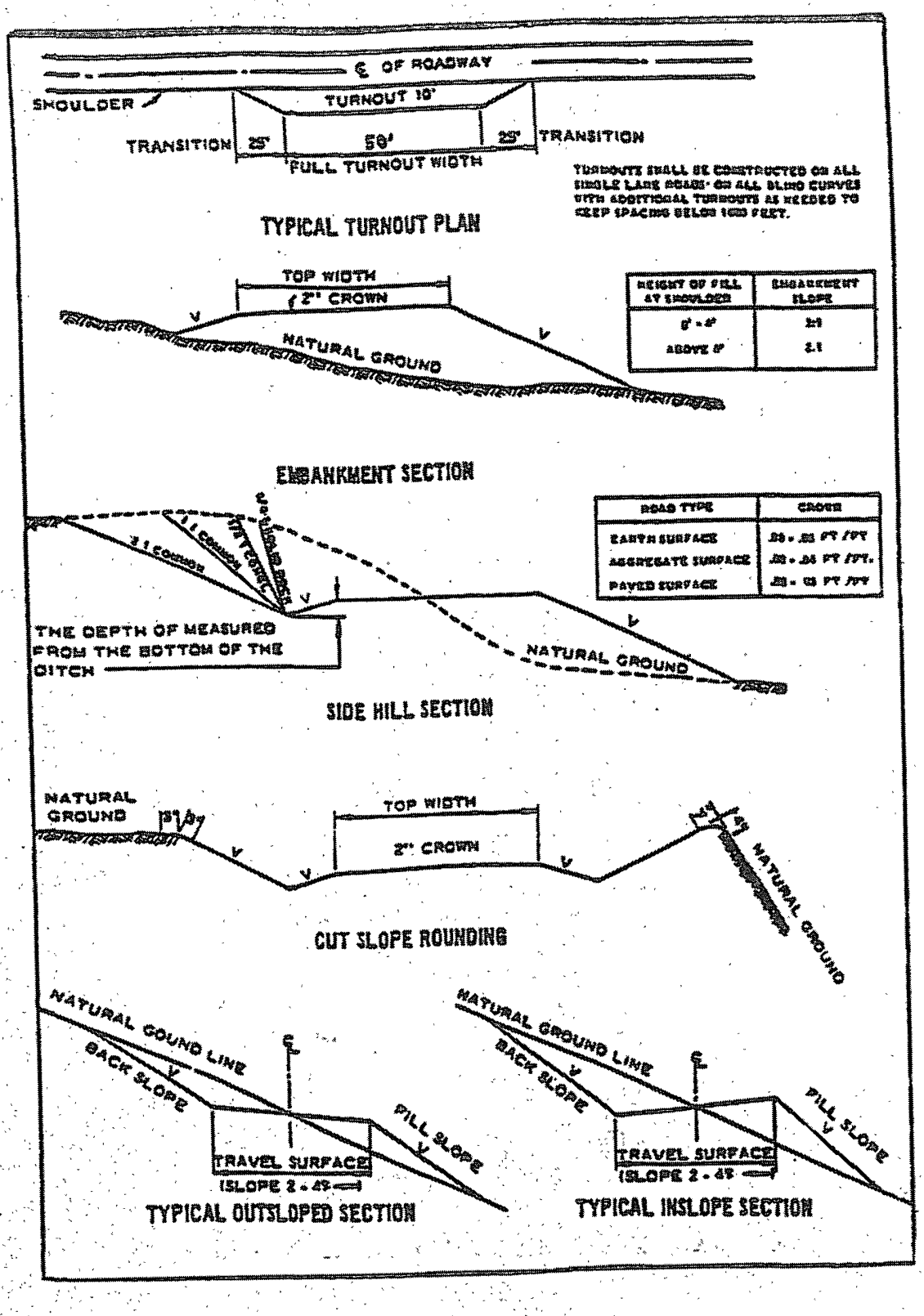
A gate shall be constructed and fastened securely to H-braces.

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

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

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

a. Spudding well
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. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

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

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

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

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

Medium cave/karst.
Possible water flows in the Salado Group and Delaware Mountain Group.
Possible lost circulation in the Delaware Mountain Group.

1. The **13-3/8** inch surface casing shall be set **at approximately 525 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **Rustler Anhydrite could be encountered shallower.**

    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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

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

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Casing to be set in the Lamar Limestone at approximately 2820'. Brine water mud to be used to setting depth. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst concerns.**

NOTE: No pilot hole will be drilled according to the operator. Therefore no plug back of the pilot hole is needed.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement will be required as excess cement calculated to less than 5%.**

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

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. 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.

3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. The tests shall be done by an independent service company.

    b. The results of the test shall be reported to the appropriate BLM office.

    c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

    d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

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

WWI 020709

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

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

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

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

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

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

Seed Mixture 4, for Gypsum 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 no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

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

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

Species	lb/acre
Alkali Sacaton (Sporobolus airoides)	1.0
DWS Four-wing saltbush (Atriplex canescens)	5.0

DWS: DeWinged Seed

*Pounds of pure live seed:

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

(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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