

MAR 10 2009

RM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
June 16, 2008

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address OGX RESOURCES, LLC. P. O. BOX 2064 MIDLAND, TEXAS 79702		OGRID Number 217955
		API Number 30-015-37000
Property Code 37623	Property Name FALCON "28"	Well No. 1H
Proposed Pool 1 CULEBRA BLUFF-BONE SPRING SOUTH (15011)		Proposed Pool 2

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Country
H	28	23S	28E		1980'	NORTH	530'	EAST	EDDY

Proposed 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	Country
E	28	23S	28E		1980'	NORTH	350'	WEST	EDDY

Additional Well Information

Work Type Code N	Well Type Code O	Cable/Rotary ROTARY	Lease Type Code P	Ground Level Elevation 3049'
Multiple NO	Proposed Depth MD-10,324	Formation BONE SPRING	Contractor JW DRILLING CO.	Spud Date WHEN APPROVED

TVD-6030

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
17 1/2"	13 3/8"	48#	500'	1400Sx.	Surface
12 1/4"	8 5/8"	24#	2425'	650 Sx.	Surface
7 7/8"	5 1/2"	17#	10,324'	1400 Sx.	Est. 2200' FS

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHED SHEET FOR DETAIL

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <i>Joe T. Janica</i>		Approved by: <i>Jacqui Beaver</i>	
Printed name: Joe T. Janica		Title: District II Geologist	
Title: Permit Eng		Approval Date: 3/11/09	Expiration Date: 3/11/2011
E-mail Address: joejanica@valornet.com			
Date: 03/09/09	Phone: 575-391-8503	Conditions of Approval Attached ☐	

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 500'. Run and set 500' of 13 3/8" 48# H-40 ST&C casing. Cement with 200 Sx. of 35/65/6 Class "C" Premium Plus POZ, + 6% Bentonite, + 5% Salt, + 5% MPA-5, + 0.0% Sodium Metasilicate, + 5# LCM/Sx. Yield 2.0. Tail in with 200 Sx. of Class "C" Premium Plus cement, + 2% CaCl. Yield 1.34, circulate cement to surface.
3. Drill 12½" hole to 2425'. Run and set 2425' of 8 5/8" 24# J-55 ST&C casing. Cement with 450 Sx. of Class "C" Premium Plus POZ, + 4% Bentonite, + 5% Salt, + 5% MPA-5, + 0.7% Sodium Metasilicate, + 5# LCM/Sx, Yield 2.02. Tail in with 200 Sx. of Class "C" Premium Plus cement + 2% CaCl, Yield 1.34, circulate cement to surface.
4. Drill 7 7/8" hole to 10,324'. Run and set 10,324' of 5½" 17# N-80 LT&C & BTC. Cement with 800 Sx. of Premium Plus Class "H" cement + 0.7% FL-62, + 0.4% BA-10A, + 0.1% FL-52, Yield 2.44. Tail in with 600 Sx. of 50/50 Class "C" POZ, + 10% Bentonite, + 5% Salt, Yield 1.33, estimated top of cement 2200'.

THIS WELL WILL BE DRILLED WITH A CLOSED MUD SYSTEM

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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37000	Pool Code 15011	Pool Name CULEBRA BLUFF-BONE SPRING SOUTH
Property Code 37623	Property Name FALCON "28"	Well Number 1H
OGRID No. 217955	Operator Name OGX RESOURCES, L.L.C.	Elevation 3049'

Surface Location

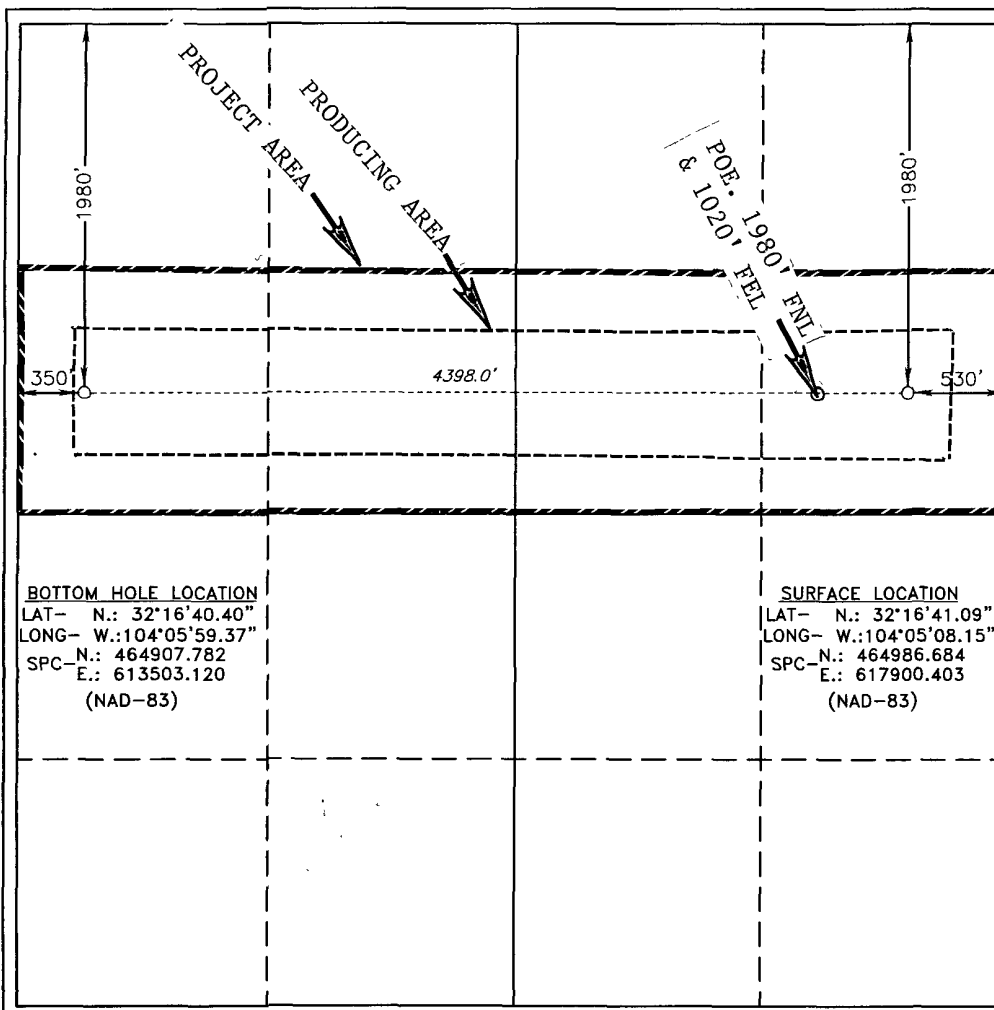
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	28	23 S	28 E		1980	NORTH	530	EAST	EDDY

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
E	28	23 S	28 E		1980	NORTH	350	WEST	EDDY

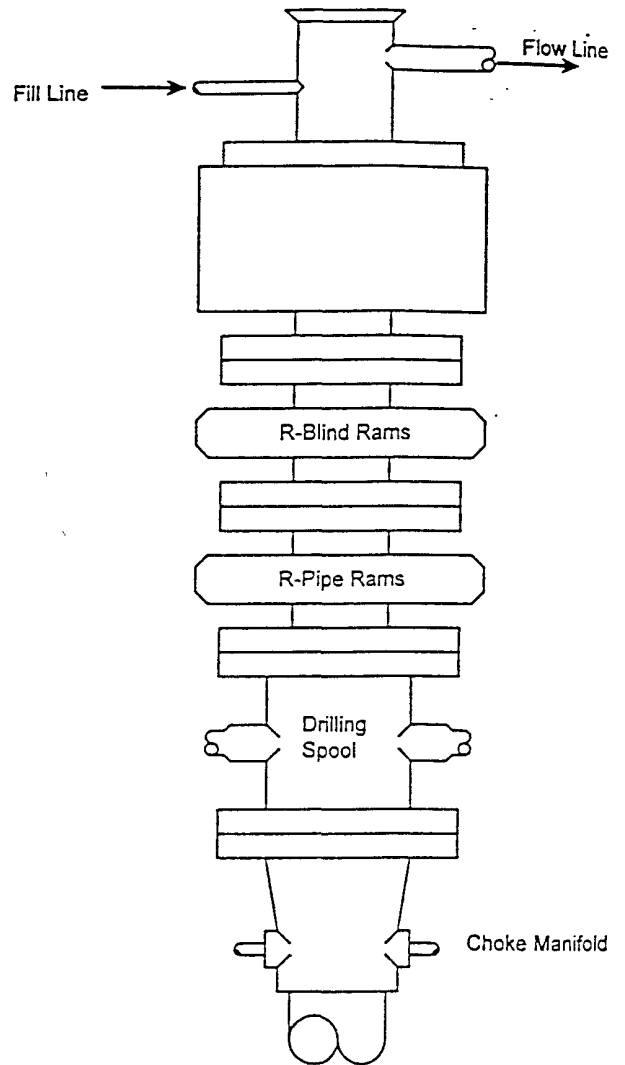
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

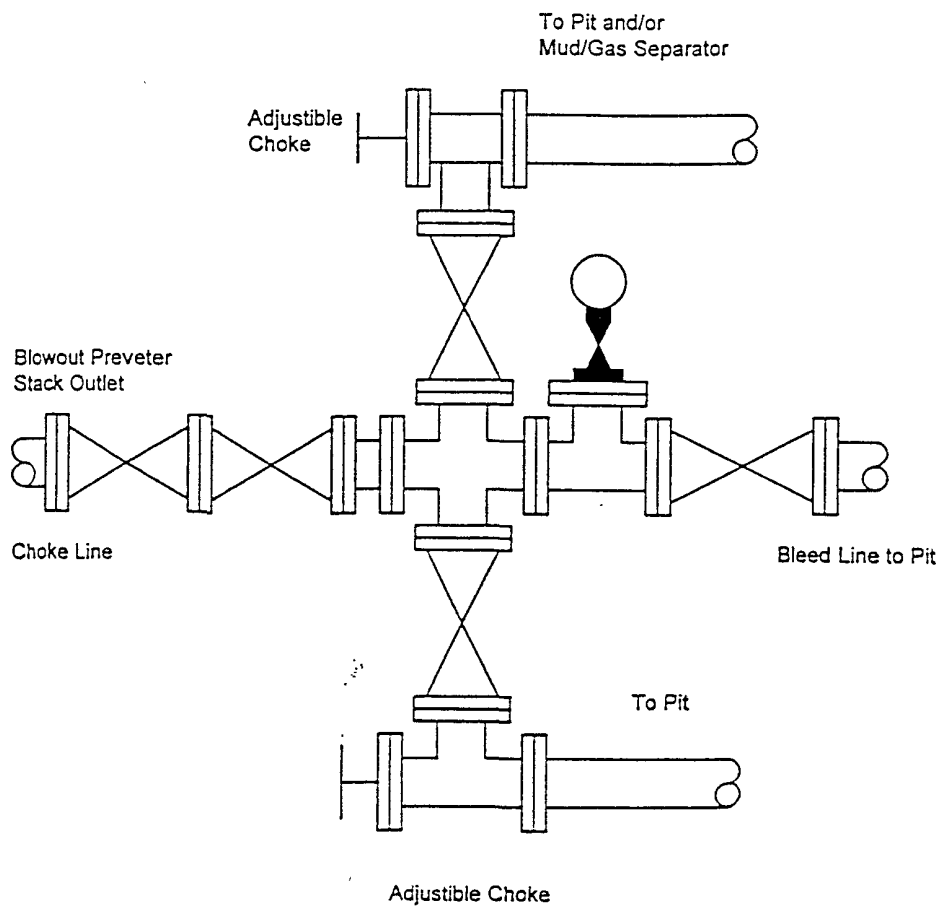
 BOTTOM HOLE LOCATION LAT- N.: 32°16'40.40" LONG- W.: 104°05'59.37" SPC- N.: 464907.782 E.: 613503.120 (NAD-83) SURFACE LOCATION LAT- N.: 32°16'41.09" LONG- W.: 104°05'08.15" SPC- N.: 464986.684 E.: 617900.403 (NAD-83)	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true 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 pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Joe T. Janica</i> Date: 03/09/09 Printed Name: Joe T. Janica 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. FEBRUARY 10, 2009 Date Surveyed: Y. L. JONES Signature & Seal of Professional Surveyor: <i>[Signature]</i> W.Q. No. 21105 Certificate No. Gary, L. Jones 7977 Basin Surveys
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BLOWOUT PREVENTER SYSTEM

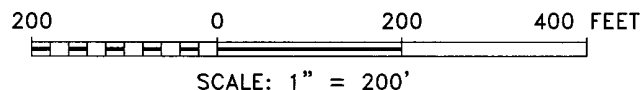
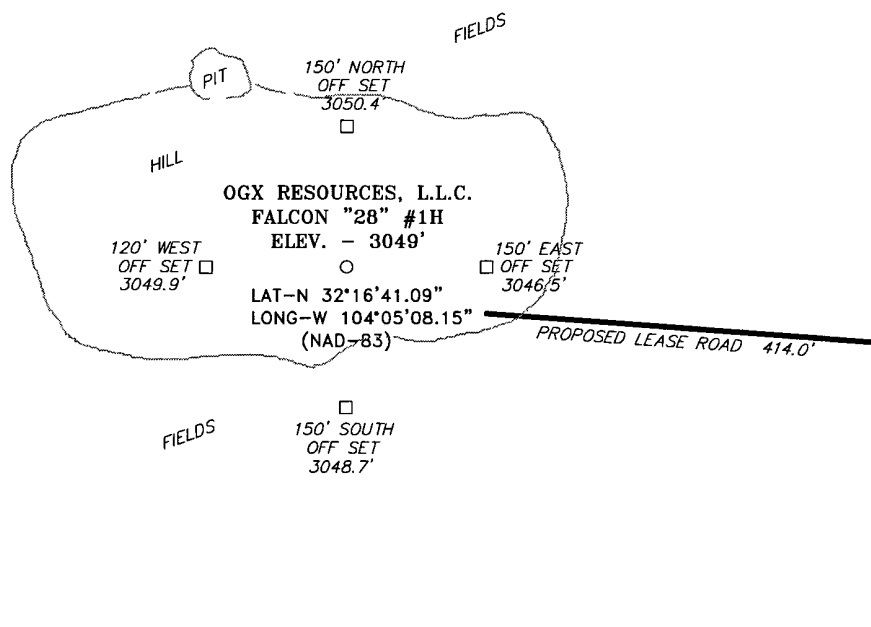
3000 PSI



Choke Manifold Assembly for 5M WP System



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



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF WEST ASH AND CO. RD. 714,
GO EAST 1.0 MILES TO NYMEYER, ON NYMEYER GO
SOUTH 0.4 MILES TO PROPOSED LEASE ROAD.

OGX RESOURCES, L.L.C.

REF: FALCON "28" #1H / Well Pad Topo

THE FALCON "28" #1H LOCATED 1980' FROM
THE NORTH LINE AND 530' FROM THE EAST LINE OF
SECTION 28, TOWNSHIP 23 SOUTH, RANGE 28 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 21105

Drawn By: J. M. SMALL

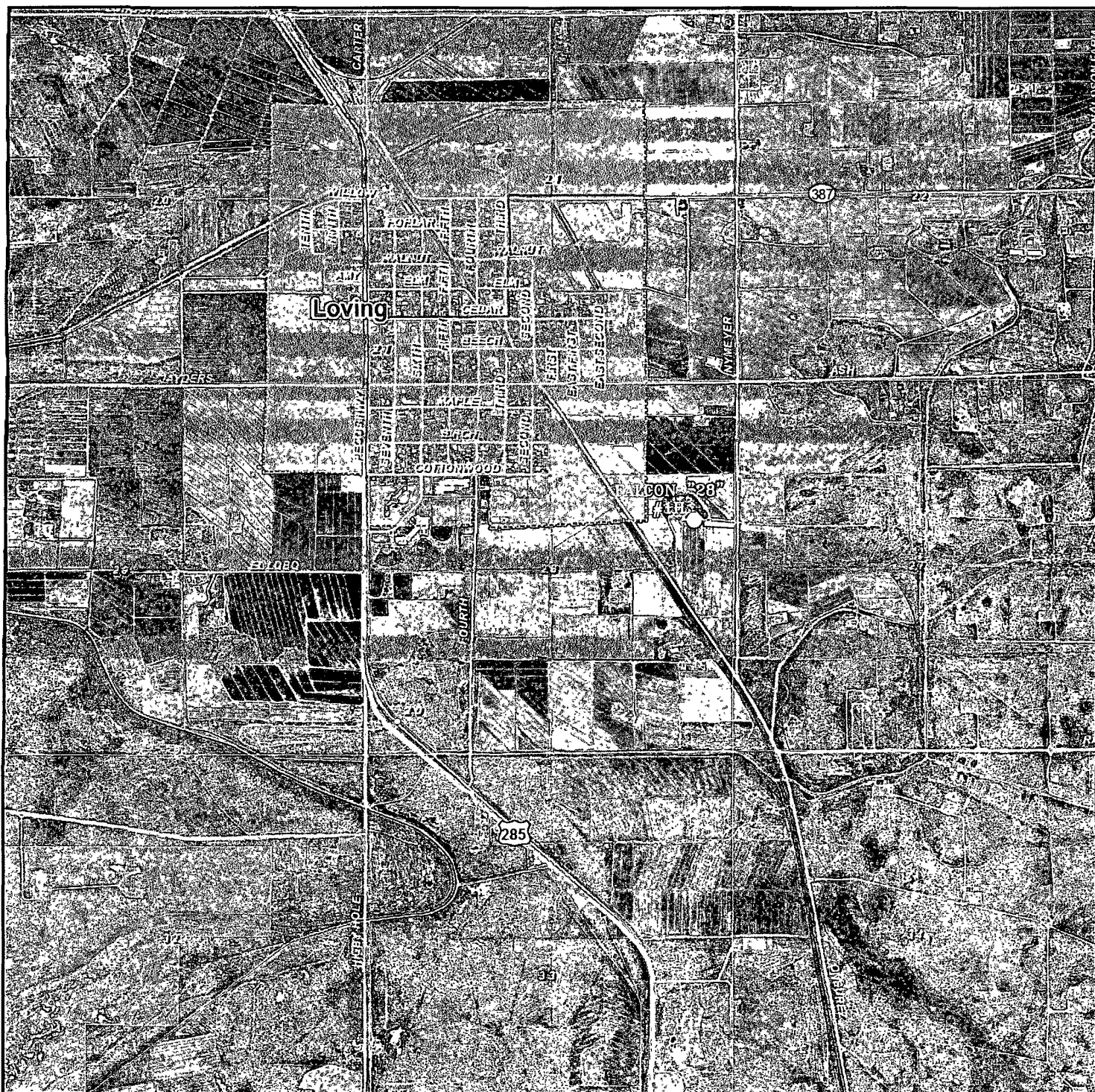
Date: 02-11-2009

Disk: JMS 21105

Survey Date: 02-10-2009

Sheet 1 of 1 Sheets

OGX
RESOURCES,
L.L.C.



FALCON "28" #1H

Located at 1980' FNL and 530' FEL

Section 28, Township 23 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

basin
surveys
focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: 21105

Scale: 1" = 2000'

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

OGX
RESOURCES,
L.L.C.

**Falcon 28 No.1H
Loving East (Delaware/Bone Spring)Field
Eddy County, New Mexico
Drilling Procedure
Mar. 2009**

General Information

Lease:	Falcon 28	AFE BCP:	\$
Well No.:	1H	AFE ACP:	
Field:	Loving East	AFE Total:	
County:	Eddy	AFE NO:	90150XX
State:	New Mexico	API No.:	30-015-XXXXX
Section:	28	Permit Date:	
Township:	23S	Permit TVD:	6,500'
Range:	28E	Proposed MD:	10,324'
Section Ties:		Drilling Days:	28
Ground Level:	3049'	KB:	
Latitude:	N: 32°16'41.09"	Longitude	W: 104° 05'08.15"

Well Objectives

The primary objective of this well is to drill and complete a horizontal lateral in the Brushy Canyon without a pilot Hole.

Directions To Well

(South of Loving NM) – West Ash & Co Rd. 714 go East 1 mi to Nymeyer / turn South on Nymeyer for 0.4 mi To lease road.

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 and intermediate. 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.

DRILLING PROGRAM**Geologic Name of Surface Formation:**

Permian

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

<u>Formation</u>	<u>Depth</u>	<u>Frm Pres</u>	<u>Remarks</u>
Basal Anhydrite	2390'	10 ppge	Drig fluid must be saturated salt water
Lamar	2600'	8.4 ppge	
Bell Canyon	2630'	8.4 ppge	Oil / Gas / Formation water /Poss.H ₂ S
Cherry Canyon	3500'	8.4 ppge	Oil / Gas / Formation water
Brushy Canyon	4673'	8.4 ppge	Oil / Gas / Formation water
Bone Spring	6212'	8.4 ppge	Oil / Gas / Formation water

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 500' and circulating cement back to surface. Potash/ fresh water sands will be protected by setting 8 5/8" casing at 2425' and circulating cement to the surface. The hydrocarbon producing intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 8 5/8" casing.

CASING PROGRAM:

HOLE SIZE	DEPTH	OD Csg	WEIGHT	COLLAR	GRADE	NEW/USED
17 1/2"	0-500'	13 3/8"	48	STC	H40	New
12 1/4"	0-2425'	8 5/8"	24	STC	J55	New
7 7/8"	0-10324' MD	5 1/2"	17	LTC & BTC	N80	New

DEPTH	OD Csg	WEIGHT	factors: Burst / Collapse / Tension		
0-500'	13 3/8"	48	1.36	2.82	12.7
0-2425'	8 5/8"	24	1.16	1.43	4.6
0-10324' MD	5 1/2"	17	1.25	1.42	1.67

13 3/8" Surface

Cement Properties	Lead	Tail
Est Volume (sacks)	200	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	

Cement Properties	<u>Lead</u>	<u>Tail</u>
Est Volume (sacks)	450	200
Density (ppg)	12.7	14.8
Yield (ft ³ /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	surface	

5 1/2" Production**Slurry Composition**

Spacer30 bbls FW
LeadPremium Plus H + .7% FL-62 + .4% BA-10A + .1% FL-52 + 45.8% Fresh water
Tail50:50 Poz C + 10% Bentonite + 5% NaCl + 139.7% Fresh water

Cement Properties

	<u>Lead</u>	<u>Tail</u>
Estimated Volume, sx	800	600
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, ft	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/100ft ²)	Mud Type
0' – 500' Set 13-3/8" Casing	8.6 – 8.8	36 – 38	N/C	6 – 10	6 – 20	Spud Mud
500' – 2,425' Set 8-5/8" Casing	10.0 – 10.1	29 – 30	N/C	0 – 1	0 – 1	Brine
2,425' – 6000' TVD	8.4 – 10.0	28 – 29	N/C	0 – 1	0 – 1	Fresh Water To Brine
6,000' – 10,324' 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.

H₂S detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" 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 hole will be logged: GR / Dual Laterolog / Neutron-Density / Caliper

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 H₂S in this area. If H₂S 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 25980 psi. & BHT is 120° F.

Anticipated Starting Date & Duration:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be after April 1, 2009. Move in and drilling operations will take 28 days with an additional 14 days to complete the well and construct production facilities.

OGX Resources

Eddy County (NAD 83)

Falcon 28 #1H

Falcon 28

OH

Plan: Plan #1

Pathfinder X & Y Survey Report

11 February, 2009

OGX Resources



Azimuths to Grid North
 True North: -0.13°
 Magnetic North: 7.96°
 Magnetic Field
 Strength: 48855.0nT
 Dip Angle: 60.22°
 Date: 2/11/2009
 Model: IGRF200510

PATHFINDER ENERGY SERVICES

Project: Eddy County (NAD 83)
 Site: Falcon 28 #1H
 Well: Falcon 28
 Wellbore: OH
 Plan: Plan #1 (Falcon 28/OH)

WELL DETAILS: Falcon 28

Ground Elevation: 3049.00
 RKB Elevation: WELL @ 3049.00ft (Original Well Elev)
 Rig Name: Original Well Elev

+N-S	+E-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	464986.684	617900.403	32°16'41.087 N	104°5'8.147 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

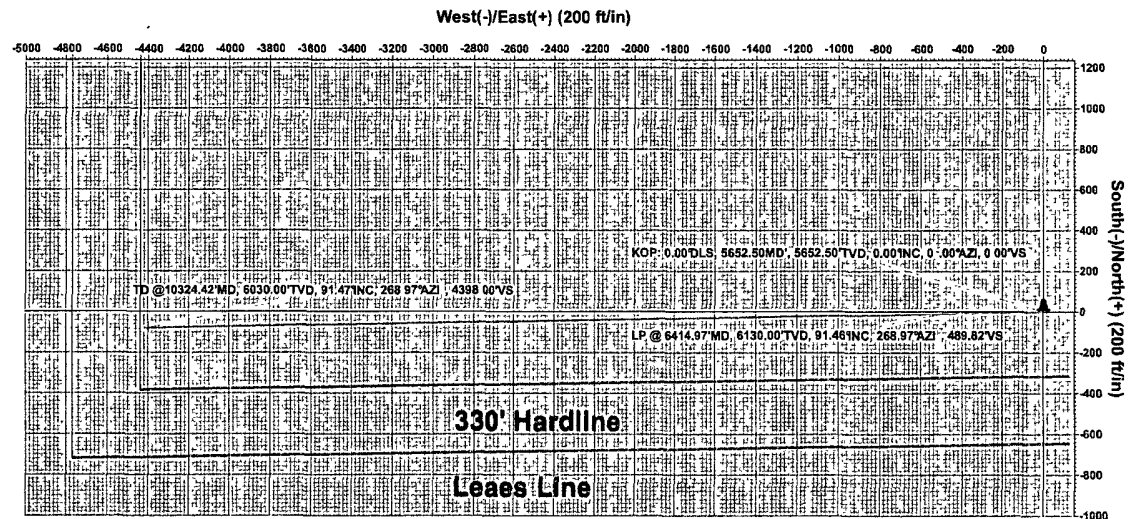
Name	TVD	+N-S	+E-W	Northing	Easting	Shape Point
PBHL (Falcon 28 #1H)	6030.00	-78.90	-4397.28	464907.782	613503.120	

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	5652.50	0.00	0.00	5652.50	0.00	0.00	0.00	0.00	0.00	
3	6414.97	91.46	268.97	6130.00	-8.81	-489.75	12.00	268.97	489.83	
4	10324.42	91.47	268.97	6030.00	-78.90	-4397.28	0.00	21.74	4397.99	PBHL (Falcon 28 #1H)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2390.00	2390.00	Bone Spring
2600.00	2600.00	Base Anhydrite
2630.00	2630.00	Lamar
3500.00	3500.00	Bell Canyon
3500.00	3500.00	Cherry Canyon
4673.00	4673.00	Brushy Canyon



PROJECT DETAILS: Eddy County (NAD 83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level
 Local North: Grid

Plan: Plan #1 (Falcon 28/OH)

Created By: Aaron Pullin Date: 14-48, February 11 2009
 Checked: _____ Date: _____

OGX Resources



Azimuths to Grid North
True North: -0.13°
Magnetic North: 7.96°

Magnetic Field
Strength: 48855.0snT
Dip Angle: 60.22°
Date: 2/11/2009
Model: IGRF200510

PATHFINDER ENERGY SERVICES

Project: Eddy County (NAD 83)
Site: Falcon 28 #1H
Well: Falcon 28
Wellbore: OH
Plan: Plan #1 (Falcon 28/OH)

WELL DETAILS: Falcon 28

Ground Elevation: 3049.00
RKB Elevation: WELL @ 3049.00ft (Original Well Elev)
Rig Name: Original Well Elev

+N-S	+E-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	464986.684	617900.403	32° 18' 41.087 N	104° 5' 8.147 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

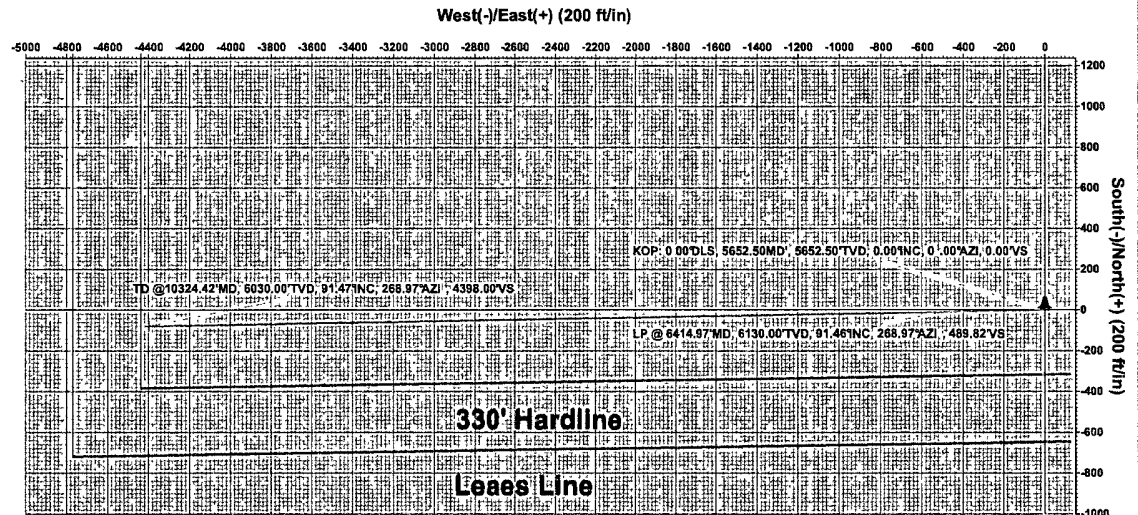
Name	TVD	+N-S	+E-W	Northing	Easting	Shape
PBHL (Falcon 28 #1H)	6030.00	-78.90	-4397.28	464907.782	613503.120	Point

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	5652.50	0.00	0.00	5652.50	0.00	0.00	0.00	0.00	0.00	
3	6414.97	91.46	268.97	6130.00	-8.81	-489.75	12.00	268.97	489.83	
4	10324.42	91.47	268.97	6030.00	-78.90	-4397.28	0.00	21.74	4397.99	PBHL (Falcon 28 #1H)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2390.00	2390.00	Bone Spring
2600.00	2600.00	Base Anhydrite
2630.00	2630.00	Lamar
3500.00	3500.00	Cherry Canyon
4673.00	4673.00	Brushy Canyon



PROJECT DETAILS: Eddy County (NAD 83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

Plan, Plan #1 (Falcon 28/OH)

Created By: Aaron Pullin Date: 14.49, February 11 2009
Checked: _____ Date: _____

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003.16 Single User Db

Project	Eddy County (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Falcon 28 #1H		
Site Position:		Northing:	464,986.684 ft
From:	Map	Easting:	617,900.403 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	32° 16' 41.087 N
		Longitude:	104° 5' 8.147 W
		Grid Convergence:	0.13 °

Well	Falcon 28		
Well Position	+N/-S	0.00 ft	Northing: 464,986.684 ft
	+E/-W	0.00 ft	Easting: 617,900.403 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	32° 16' 41.087 N
		Longitude:	104° 5' 8.147 W
		Ground Level:	3,049.00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	2/11/2009	(°)
			8.09
			Dip Angle (°)
			60.22
			Field Strength (nT)
			48,855

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction (°)
			268.97

Survey Tool Program	Date 2/11/2009		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
0.00	10,324.42	Plan #1 (OH)	MWD
			Description
			MWD - Standard

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	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	-3,049.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
100.00	0.00	0.00	100.00	-2,949.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
200.00	0.00	0.00	200.00	-2,849.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
300.00	0.00	0.00	300.00	-2,749.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
400.00	0.00	0.00	400.00	-2,649.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
500.00	0.00	0.00	500.00	-2,549.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
600.00	0.00	0.00	600.00	-2,449.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
700.00	0.00	0.00	700.00	-2,349.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
800.00	0.00	0.00	800.00	-2,249.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
900.00	0.00	0.00	900.00	-2,149.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,000.00	0.00	0.00	1,000.00	-2,049.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,100.00	0.00	0.00	1,100.00	-1,949.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,200.00	0.00	0.00	1,200.00	-1,849.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,300.00	0.00	0.00	1,300.00	-1,749.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,400.00	0.00	0.00	1,400.00	-1,649.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,500.00	0.00	0.00	1,500.00	-1,549.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,600.00	0.00	0.00	1,600.00	-1,449.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,700.00	0.00	0.00	1,700.00	-1,349.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,800.00	0.00	0.00	1,800.00	-1,249.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
1,900.00	0.00	0.00	1,900.00	-1,149.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,000.00	0.00	0.00	2,000.00	-1,049.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,100.00	0.00	0.00	2,100.00	-949.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,200.00	0.00	0.00	2,200.00	-849.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,300.00	0.00	0.00	2,300.00	-749.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,390.00	0.00	0.00	2,390.00	-659.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
Base Anhydrite											
2,400.00	0.00	0.00	2,400.00	-649.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	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)	
2,500.00	0.00	0.00	2,500.00	-549.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,600.00	0.00	0.00	2,600.00	-449.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
Lamar											
2,630.00	0.00	0.00	2,630.00	-419.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
Bell Canyon											
2,700.00	0.00	0.00	2,700.00	-349.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,800.00	0.00	0.00	2,800.00	-249.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
2,900.00	0.00	0.00	2,900.00	-149.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,000.00	0.00	0.00	3,000.00	-49.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,100.00	0.00	0.00	3,100.00	51.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,200.00	0.00	0.00	3,200.00	151.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,300.00	0.00	0.00	3,300.00	251.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,400.00	0.00	0.00	3,400.00	351.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,500.00	0.00	0.00	3,500.00	451.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
Cherry Canyon											
3,600.00	0.00	0.00	3,600.00	551.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,700.00	0.00	0.00	3,700.00	651.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,800.00	0.00	0.00	3,800.00	751.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
3,900.00	0.00	0.00	3,900.00	851.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,000.00	0.00	0.00	4,000.00	951.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,100.00	0.00	0.00	4,100.00	1,051.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,200.00	0.00	0.00	4,200.00	1,151.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,300.00	0.00	0.00	4,300.00	1,251.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,400.00	0.00	0.00	4,400.00	1,351.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,500.00	0.00	0.00	4,500.00	1,451.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,600.00	0.00	0.00	4,600.00	1,551.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,673.00	0.00	0.00	4,673.00	1,624.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
Brushy Canyon											

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	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)	
4,700.00	0.00	0.00	4,700.00	1,651.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,800.00	0.00	0.00	4,800.00	1,751.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
4,900.00	0.00	0.00	4,900.00	1,851.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,000.00	0.00	0.00	5,000.00	1,951.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,100.00	0.00	0.00	5,100.00	2,051.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,200.00	0.00	0.00	5,200.00	2,151.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,300.00	0.00	0.00	5,300.00	2,251.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,400.00	0.00	0.00	5,400.00	2,351.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,500.00	0.00	0.00	5,500.00	2,451.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,600.00	0.00	0.00	5,600.00	2,551.00	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
5,652.50	0.00	0.00	5,652.50	2,603.50	0.00	0.00	0.00	0.00	464,986.68	617,900.40	
KOP: 0.00°DLS, 5652.50MD, 5652.50TVD, 0.00°INC, 0.00°AZI, 0.00°VS											
5,675.00	2.70	268.97	5,674.99	2,625.99	-0.01	-0.53	0.53	12.00	464,986.67	617,899.87	
5,700.00	5.70	268.97	5,699.92	2,650.92	-0.04	-2.36	2.36	12.00	464,986.64	617,898.04	
5,725.00	8.70	268.97	5,724.72	2,675.72	-0.10	-5.49	5.49	12.00	464,986.59	617,894.91	
5,750.00	11.70	268.97	5,749.32	2,700.32	-0.18	-9.91	9.92	12.00	464,986.51	617,890.49	
5,775.00	14.69	268.97	5,773.66	2,724.66	-0.28	-15.62	15.62	12.00	464,986.40	617,884.78	
5,800.00	17.69	268.97	5,797.67	2,748.67	-0.41	-22.59	22.59	12.00	464,986.28	617,877.81	
5,825.00	20.69	268.97	5,821.27	2,772.27	-0.55	-30.81	30.81	12.00	464,986.13	617,869.60	
5,850.00	23.69	268.97	5,844.42	2,795.42	-0.72	-40.25	40.25	12.00	464,985.96	617,860.16	
5,875.00	26.69	268.97	5,867.04	2,818.04	-0.91	-50.88	50.89	12.00	464,985.77	617,849.52	
5,900.00	29.69	268.97	5,889.07	2,840.07	-1.13	-62.69	62.70	12.00	464,985.56	617,837.71	
5,925.00	32.69	268.97	5,910.46	2,861.46	-1.36	-75.63	75.64	12.00	464,985.32	617,824.77	
5,950.00	35.69	268.97	5,931.14	2,882.14	-1.61	-89.68	89.69	12.00	464,985.07	617,810.73	
5,975.00	38.68	268.97	5,951.05	2,902.05	-1.88	-104.78	104.80	12.00	464,984.80	617,795.62	
6,000.00	41.68	268.97	5,970.15	2,921.15	-2.17	-120.91	120.93	12.00	464,984.51	617,779.50	
6,025.00	44.68	268.97	5,988.37	2,939.37	-2.48	-138.01	138.03	12.00	464,984.20	617,762.39	

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	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)	
6,050.00	47.68	268.97	6,005.68	2,956.68	-2.81	-156.04	156.07	12.00	464,983.88	617,744.36	
6,075.00	50.68	268.97	6,022.02	2,973.02	-3.15	-174.96	174.99	12.00	464,983.54	617,725.44	
6,100.00	53.68	268.97	6,037.35	2,988.35	-3.50	-194.70	194.73	12.00	464,983.18	617,705.70	
6,125.00	56.68	268.97	6,051.62	3,002.62	-3.87	-215.22	215.25	12.00	464,982.81	617,685.18	
6,150.00	59.68	268.97	6,064.81	3,015.81	-4.25	-236.46	236.49	12.00	464,982.43	617,663.95	
6,175.00	62.68	268.97	6,076.86	3,027.86	-4.64	-258.35	258.39	12.00	464,982.04	617,642.05	
6,200.00	65.67	268.97	6,087.75	3,038.75	-5.05	-280.85	280.89	12.00	464,981.63	617,619.55	
6,225.00	68.67	268.97	6,097.44	3,048.44	-5.46	-303.88	303.93	12.00	464,981.22	617,596.52	
6,250.00	71.67	268.97	6,105.92	3,056.92	-5.89	-327.40	327.45	12.00	464,980.80	617,573.01	
6,275.00	74.67	268.97	6,113.16	3,064.16	-6.32	-351.32	351.38	12.00	464,980.37	617,549.08	
6,300.00	77.67	268.97	6,119.14	3,070.14	-6.75	-375.59	375.65	12.00	464,979.93	617,524.82	
6,325.00	80.67	268.97	6,123.83	3,074.83	-7.19	-400.14	400.20	12.00	464,979.49	617,500.27	
6,350.00	83.67	268.97	6,127.24	3,078.24	-7.64	-424.90	424.96	12.00	464,979.04	617,475.51	
6,375.00	86.67	268.97	6,129.35	3,080.35	-8.09	-449.80	449.87	12.00	464,978.60	617,450.60	
6,400.00	89.66	268.97	6,130.15	3,081.15	-8.54	-474.78	474.86	12.00	464,978.15	617,425.62	
6,414.97	91.46	268.97	6,130.00	3,081.00	-8.81	-489.75	489.83	12.00	464,977.88	617,410.66	
LP @ 6414.97 MD, 6130.00 TVD, 91.46 INC, 268.97 AZI, 489.82 VS											
6,500.00	91.46	268.97	6,127.83	3,078.83	-10.33	-574.73	574.83	0.00	464,976.35	617,325.67	
6,600.00	91.46	268.97	6,125.28	3,076.28	-12.13	-674.69	674.79	0.00	464,974.55	617,225.72	
6,700.00	91.46	268.97	6,122.74	3,073.74	-13.93	-774.64	774.76	0.00	464,972.76	617,125.77	
6,800.00	91.46	268.97	6,120.19	3,071.19	-15.72	-874.59	874.73	0.00	464,970.96	617,025.81	
6,900.00	91.46	268.97	6,117.64	3,068.64	-17.52	-974.54	974.70	0.00	464,969.17	616,925.86	
7,000.00	91.46	268.97	6,115.09	3,066.09	-19.31	-1,074.49	1,074.66	0.00	464,967.37	616,825.91	
7,100.00	91.46	268.97	6,112.53	3,063.53	-21.11	-1,174.44	1,174.63	0.00	464,965.57	616,725.96	
7,200.00	91.46	268.97	6,109.98	3,060.98	-22.91	-1,274.39	1,274.60	0.00	464,963.78	616,626.01	
7,300.00	91.46	268.97	6,107.43	3,058.43	-24.70	-1,374.35	1,374.57	0.00	464,961.98	616,526.06	
7,400.00	91.46	268.97	6,104.88	3,055.88	-26.50	-1,474.30	1,474.53	0.00	464,960.19	616,426.11	

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	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)
7,500.00	91.46	268.97	6,102.32	3,053.32	-28.29	-1,574.25	1,574.50	0.00	464,958.39	616,326.16
7,600.00	91.46	268.97	6,099.77	3,050.77	-30.09	-1,674.20	1,674.47	0.00	464,956.60	616,226.20
7,700.00	91.46	268.97	6,097.22	3,048.22	-31.88	-1,774.15	1,774.44	0.00	464,954.80	616,126.25
7,800.00	91.46	268.97	6,094.66	3,045.66	-33.67	-1,874.10	1,874.40	0.00	464,953.01	616,026.30
7,900.00	91.46	268.97	6,092.11	3,043.11	-35.47	-1,974.05	1,974.37	0.00	464,951.22	615,926.35
8,000.00	91.46	268.97	6,089.55	3,040.55	-37.26	-2,074.00	2,074.34	0.00	464,949.42	615,826.40
8,100.00	91.46	268.97	6,086.99	3,037.99	-39.06	-2,173.96	2,174.31	0.00	464,947.63	615,726.45
8,200.00	91.47	268.97	6,084.44	3,035.44	-40.85	-2,273.91	2,274.27	0.00	464,945.83	615,626.50
8,300.00	91.47	268.97	6,081.88	3,032.88	-42.64	-2,373.86	2,374.24	0.00	464,944.04	615,526.55
8,400.00	91.47	268.97	6,079.32	3,030.32	-44.44	-2,473.81	2,474.21	0.00	464,942.25	615,426.59
8,500.00	91.47	268.97	6,076.76	3,027.76	-46.23	-2,573.76	2,574.18	0.00	464,940.46	615,326.64
8,600.00	91.47	268.97	6,074.21	3,025.21	-48.02	-2,673.71	2,674.14	0.00	464,938.66	615,226.69
8,700.00	91.47	268.97	6,071.65	3,022.65	-49.81	-2,773.66	2,774.11	0.00	464,936.87	615,126.74
8,800.00	91.47	268.97	6,069.09	3,020.09	-51.61	-2,873.61	2,874.08	0.00	464,935.08	615,026.79
8,900.00	91.47	268.97	6,066.53	3,017.53	-53.40	-2,973.56	2,974.04	0.00	464,933.29	614,926.84
9,000.00	91.47	268.97	6,063.96	3,014.96	-55.19	-3,073.52	3,074.01	0.00	464,931.49	614,826.89
9,100.00	91.47	268.97	6,061.40	3,012.40	-56.98	-3,173.47	3,173.98	0.00	464,929.70	614,726.94
9,200.00	91.47	268.97	6,058.84	3,009.84	-58.77	-3,273.42	3,273.95	0.00	464,927.91	614,626.98
9,300.00	91.47	268.97	6,056.28	3,007.28	-60.56	-3,373.37	3,373.91	0.00	464,926.12	614,527.03
9,400.00	91.47	268.97	6,053.72	3,004.72	-62.36	-3,473.32	3,473.88	0.00	464,924.33	614,427.08
9,500.00	91.47	268.97	6,051.15	3,002.15	-64.15	-3,573.27	3,573.85	0.00	464,922.54	614,327.13
9,600.00	91.47	268.97	6,048.59	2,999.59	-65.94	-3,673.22	3,673.81	0.00	464,920.75	614,227.18
9,700.00	91.47	268.97	6,046.02	2,997.02	-67.73	-3,773.17	3,773.78	0.00	464,918.96	614,127.23
9,800.00	91.47	268.97	6,043.46	2,994.46	-69.52	-3,873.12	3,873.75	0.00	464,917.17	614,027.28
9,900.00	91.47	268.97	6,040.89	2,991.89	-71.31	-3,973.08	3,973.72	0.00	464,915.38	613,927.33
10,000.00	91.47	268.97	6,038.33	2,989.33	-73.10	-4,073.03	4,073.68	0.00	464,913.59	613,827.38
10,100.00	91.47	268.97	6,035.76	2,986.76	-74.89	-4,172.98	4,173.65	0.00	464,911.80	613,727.43

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	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)
10,200.00	91.47	268.97	6,033.19	2,984.19	-76.68	-4,272.93	4,273.62	0.00	464,910.01	613,627.47
10,300.00	91.47	268.97	6,030.63	2,981.63	-78.47	-4,372.88	4,373.58	0.00	464,908.22	613,527.52
10,324.42	91.47	268.97	6,030.00	2,981.00	-78.90	-4,397.28	4,397.99	0.00	464,907.78	613,503.12
TD @10324.42 MD, 6030.00 TVD, 91.47° INC, 268.97° AZI, 4398.00° VS - PBHL (Falcon 28 #1H)										

Pathfinder Energy Services

Pathfinder X & Y Survey Report

Company:	OGX Resources	Local Co-ordinate Reference:	Well: Falcon 28
Project:	Eddy County (NAD 83)	TVD Reference:	WELL @ 3049.00ft (Original Well Elev)
Site:	Falcon 28 #1H	MD Reference:	WELL @ 3049.00ft (Original Well Elev)
Well:	Falcon 28	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003.16 Single User Db

Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
Shape		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Longitude
PBHL (Falcon 28 #1H		0.00	0.00	6,030.00	-78.90	-4,397.28	464,907.782	613,503.120	32° 16' 40 404 N
- plan hits target									104° 5' 59.371 W
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
2,390.00	2,390.00	Base Anhydrite		0.00		
	6,212.00	Bone Spring		0.00		
3,500.00	3,500.00	Cherry Canyon		0.00		
2,600.00	2,600.00	Lamar		0.00		
2,630.00	2,630.00	Bell Canyon		0.00		
4,673.00	4,673.00	Brushy Canyon		0.00		

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
		(ft)	(ft)	
5,652.50	5,652.50	0.00	0.00	KOP: 0.00°DLS, 5652.50MD', 5652.50°TVD, 0.00°INC, 0.00°AZI, 0.00°
6,414.97	6,130.00	-8.81	-489.75	LP @ 6414.97°MD, 6130.00°TVD, 91.46°INC, 268.97°AZI, 489.82°VS
10,324.42	6,030.00	-78.90	-4,397.28	TD @10324.42°MD, 6030.00°TVD, 91.47°INC, 268.97°AZI, 4398.00°VS

Checked By: _____	Approved By: _____	Date: _____
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