Form 3160-3 (April 2004)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

		6 V 6	IN-
APPLICATION FOR PERMIT TO DRII	LL OR REENTER	5. Lease Serial 1994-0338	•
la Type of Work REEN	TER		llotee or Tribe Name
		N/A	
1b. Type of Well Oil Well Gas Well Other	Makiple Zone	7. Unit or CA	Agreement Name and No.
2. Name of Operator	RECEIVED	N/A 8 Lease Name	and Well No.
XIO Energy Inc. 167067			22/18
3a. Address	070 BUA Phone No. (include area co	' I J. API WEN N	0.11-22412
2700 Farmington Ave., Bldg. K. Ste 1 Farmington 4. Location of Well (Report location clearly and in accordance with any	n, NM 505-324-1090 State equirements)*		X45 33 443 pol. or Exploratory 2/599
At surface 1305' FNL x 1325' FWL in Sec 18, 127	•		ool, or Exploratory 7/599 alkota/Blanco Mesavend
1305 FREE X 1325 FREE IN Sec 15, 12 //	a, ron		, M., or Blk. and Survey or Area
At proposed prod. zone 660' FNL x 1940' FWL in	n Sec 18, T27N, RSW	(C) Sec	18, 127N, RSW
14. Distance in miles and direction from nearest town or post office*		12. County or I	Parish 13. State
Approx 17.1 miles Southeast of Blo		San Juan	NM.
15. Distance from proposed*	16. No. of Acres in lease	17. Spacing Unit dedi	cated to this well
property or lease line, ft.  (Also to nearest drg. unit line, if any)	2400.96	<i>∯</i> ₩/2 3	21.70 DK-MV
18. Distance from proposed location*	19. Proposed Depth	20. BLM/BIA Bond	No. on file
to nearest well, drilling, completed,	1		
applied for, on this lease, ft.	7040 '	יט י	13-000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will star	rt* 23. Estima	ated duration
6068' Ground Level	January 2006		2 weeks
			2 1023
	24. Attachments		
The following, completed in accordance with the requirements of Onshore	Oil and Gas Order No. 1, shall be attached	to this form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> <li>A Surface Use Plan (if the location is on National Forest System Lands SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>		·	an existing bond on file (see
25. Signuature	Name (Printed/Typed)		Date
Kyla Vaughan	Kyla Vaughan		12/14/05
Title ()			
Regulatory Compliance Tech			
Approved by (Signautre)	Name (Printed/Typed)		Date /2/19/85°
Title 1	Office		<del></del>
AFM )	FI		
Application approval does not warrant or certify that the applicant holds conduct operations thereon.  Conditions of approval, if any, are attached.	legal or equitable title to those rights in	the subject lease whic	h would entitle the applicant to
T4  19   19   C   Continu   1001 1   T4  40   10   C   C   C   C   C   C   C   C   C	····· C · · · · · · · · · · · · · · · ·	#	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations as to	crime for any person knowlingly and willful any matter within its jurisdiction.	illy to make to any dep	oartment or agency of the United
*(Instructions on page 2)	A. C. C.	06160693030	
HOLD C194 FOR div	rectional something	(2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	3
	any matter within its jurisdiction.  RECORD Sover	Eceived Coms. Div. Dist. 3	\$\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
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25 PRCT 1 P.O. Bair 1980, Nobbel N.M. 88241-1980

State of New Mexico
Energy, Winerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies

DISTRICT () P.O. Drower CO. Artesia, N.M. 88219-0719

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DISTRICT 1000 RE		d. Arter,	N.M. 87410			ONSERVATIO P.O. Box 2	2088				se — 4 Coples se — 3 Copies
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DISTRICT 1 P.O. Bux 1980, Hobbs. N.M. 86241-1680

# State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back
Ibmit to Appropriate District Office

DESTRICT II P.O. Draper DD, Artenia, N.M. 88211—0719

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

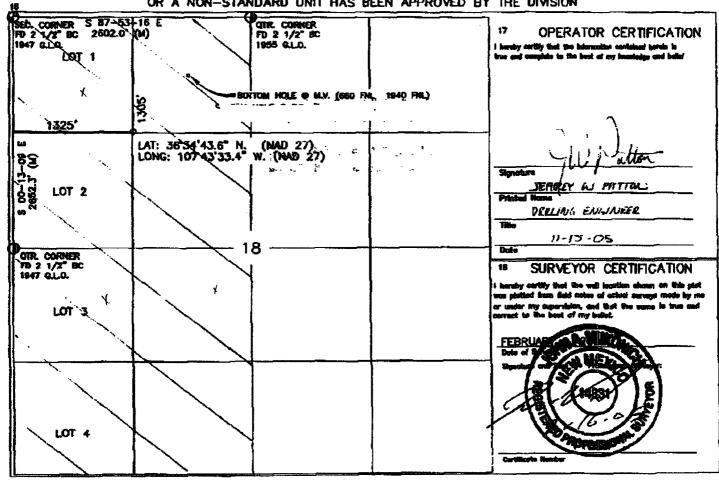
SISTRICT III 1000 Rio Brazon Rd., Aztec, PLM. 87410 OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504--2088

AMENDED REPORT

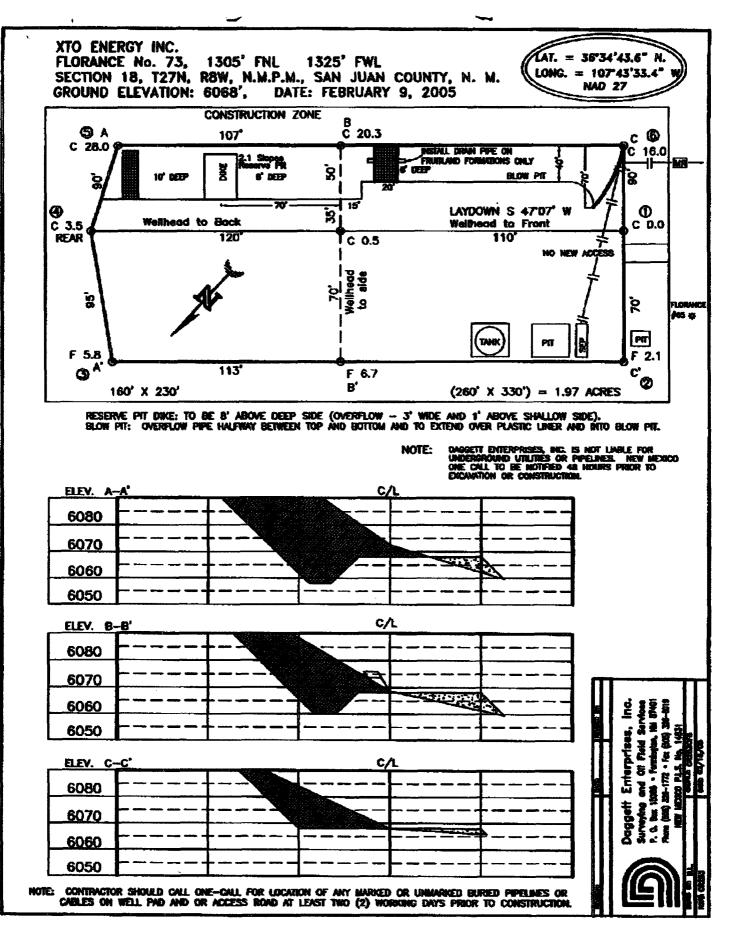
DISTRECT IV PO Box 2006, Santo Fe, NM 87504-2006

# WELL LOCATION AND ACREAGE DEDICATION PLAT

			*****	CONTIO	א עווט או	MEAGE DED	CATION	_D 1			
30-045-33443 Pool Code Planter Pool Code 72317 SLAVICO MESAVERDE											
*Property Code *Property Home *WEE Number											
22608 FLORANCE 73											
*Operator Name   Emorition											
1670	61				XTO ENERG	EY INC.		ı	6068		
					10 Surface	Location					
UR or lot no. C	Section 18	Township 27N	Range 8-W	Lot ldn	Feet from the 1305	North/South tine NORTH	Feet from the 1325	East/West line WEST	SAN JUAN		
			11 Botte	om Hole	Location	f Different Fro	m Surface				
Ut. or tot no.	Section 18	Township 27-N	Range 8-W	Lot Ida	Feet from the	North/South line NORTH	Feet from the 191401	East/West fine WEST	SAN JUAN		
Dedicated Acres	16	1/	Joint or Intil	***************************************	* Consolidation C	inde	10 Order No.				
321.70		2	I								
NO ALLOW	ABLE W								CONSOLIDATED		
		ORA	NON-STA	ANDARO	UNIT HAS E	EEN APPROVE	D BY THE DI	VISION			



Submit 3 Copies To Appropriate District	State of New Mo				Form C-	
Office , District I	Energy, Minerals and Natu	ral Resources	TWEET L ADIAL		May 27, 2	2004
1625 N. French Dr., Hobbs, NM 87240 District II	OH COMORDY ATTO	AL DIVIGION	WELL API N	32-045-3	33443	,
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION 1220 South St. Fra		5. Indicate Ty	pe of Lease		
District III 1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 8		STATE		Е 🗆	- 1
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Dunius 2 0, 1 1112 0		6. State Oil &	Gas Lease No	),	
			NM-03380			
SUNDRY NOTIC (DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC PROPOSALS.)		OR PLUG BACK TO A	Florance	ne or Unit Agre	ement Name	<b>3</b> :
1. Type of Well: Oil Well Gas Well X	Other		8. Well Numb	ber #73		
2. Name of Operator			9. OGRID Nu		· · · · · · · · · · · · · · · · · · ·	$\Box$
XIO Energy Inc.		· · · · · · · · · · · · · · · · · · ·		167067		
3. Address of Operator			10. Pool nam			
2700 Farmington Ave., Bldg 4. Well Location	. K. Ste 1 Farmington, N	M 87401	Rlanco Mesa	werde	-	-
Unit Letter C:	1305 feet from the No.	rth line and	1325 fee	et from the	West	line
Om Latter	icct nom the	III. (III		7. HOIII (118)		
Section 18		Range 8W	PER	MEM County	SAN JU	AN
	11. Elevation (Show whether 6068' Green	DR, RKB, RT, GR, el und Elevation	tc.)			
Pit or Below-grade Tank Application X				4	1200	
Pit type DRILL Depth to Groundwater.	>100 Distance from nearest fres	h water well <u>&gt;1000</u> Di	stance from neares	t surface water ځ	1000	-
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume	bhls; Constructi	on Material			
NOTICE OF INTE	PLUG AND ABANDON	SUB REMEDIAL WORK	SEQUENT	REPORT ( ] ALTER	RING CASIN	G □
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILL	ING OPNS. L_	] PLUG ABANI	AND DONMENT	ш
PULL OR ALTER CASING	MULTIPLE COMPLETION	CASING TEST AND CEMENT JOB		]		
OTHER: PIT	x	OTHER:				
<ol> <li>Describe proposed or completed of starting any proposed work). or recompletion.</li> </ol>	SEE RULE 1103. For Multiple	e Completions: Attacl				
XTO Energy proposed to in	nstall a pit on location f	or drilling.				
			11 11 6			
I hereby certify that the information at grade tank has been/will be constructed or	love is true and complete to the losed according to NMOCD guideling	Dest of my knowledg	e and benet. If the or an (attached	i <b>rther certify that</b> d) alternative OC	a <b>ny pit or bel</b> D-approved pi	ow- lan
SIGNATURE TURA	21101	TF Regulatory C	-	•	11/29/0	
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Type or print name Kyla Vanghan	Ŏ	,		Telephone No.		726
For State Use Only	· / // 4/	EPUTY OIL & GAS INC	PECTOR, OST.	p n:	C272	nnk
APPROVED BY	TI	TLE		DATE		AAA
Conditions of Approval, if any:	y			EX	HIBIT	D



# XTO ENERGY INC.

# Florance #73 APD Data December 14, 2005

Location: 1305' FNL x 1325' FWL Sec 18, T27N, R8W County: San Juan State: New Mexico

Prop BHL: 660'FNL x 1940' FWL Sec 18, T27N, R8W

GREATEST PROJECTED TD: 7040' OBJECTIVE: Blanco Mesaverde/Basin Dakota

APPROX GR ELEV: <u>6080'</u> Est KB ELEV: <u>6772' (12' AGL)</u>

# 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 7040'
HOLE SIZE	12.25"	7.875"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.20
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

## 2. CASING PROGRAM:

Surface Casing: 8.625" casing to be set at ± 360' in a 12-1/4" hole filled with 9.20 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-360'	360°	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	7.950	17.13	28.24

Production Casing: 5.5" casing to be set at TD (±7040') in 7-7/8" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-7040	7040°	15.5#	<b>J-</b> 55	ST&C	4040	4810	202	4.950	4.825	1.20	1.43	1.85

Note: Safety Factors are calculated using vertical wellbore assumptions.

### 3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

# 4. <u>CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):</u>

A. Surface:

8.625", 24.0#, J-55, ST&C casing to be set at  $\pm$  360' in 12-1/4" hole.

214 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft<sup>3</sup>/sk, & 6.70 gal wtr/sk.

Total slurry volume is 297 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'.

B. <u>Production:</u> 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at  $\pm$ 7040' in 7.875" hole. DV Tool set  $(a, \pm 0)$ '

### LEAD:

±735 sx of Premium Lite HS (Type III/Poz/Gel) with 2% salt, 1/4 pps cello, 0.2% dispersant, 0.5% fluid loss & 2% LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

### TAIL:

150 sx Type III with 5% bonding additive, 1/4 pps cello, 2% LCM, 0.3% dispersant & 0.2% fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

Total estimated slurry volume for the 5-1/2" production casing is\_1708 ft3.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 40%. It will be attempted to circulate cement to the surface.

# 5. LOGGING PROGRAM:

- A. Mud Logger: The mud logger will come on at 2,900' and will remain on the hole until TD. The mud will be logged in 10' intervals.
- B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (7040') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7040') to 3,000'.

# 6. FORMATION TOPS:

Est. KB Elevation: 6772'

Formation	TV Sub- Sea	TVD	Measure d Depth	Formation	TV Sub- Sea	TVD	Measured Depth
Ojo Alamo SS	4903	1177	1197	Gallup	488	5592	5675
Kirtland Shale	4719	1361	1384	Greenhorn	-304	6384	6467
Farmington SS				Graneros	-364	6444	6527
Fruitland Formation	4418	1662	1691	Dakota 1*	-406	6486	6569
Lower Fruitland Coal				Dakota 2*	-438	6518	6601
Pictured Cliffs SS	3944	2136	2173	Dakota 3*	-480	6560	6643
Lewis Shale	3758	2322	2362	Dakota 4*	-537	6617	6700
Chacra SS**	3034	3046	3099	Dakota 5*	-579	6659	3742
Cliffhouse SS	2417	3663	3726	Dakota 6*	-639	3719	6802
Menefee	2276	3804	3869	Burro Canyon	-663	6743	6826
Point Lookout SS**	1672	4408	4484	Morrison*	-683	6763	6846
Mancos Shale	1312	4768	4850	TD	-882	6962	7045

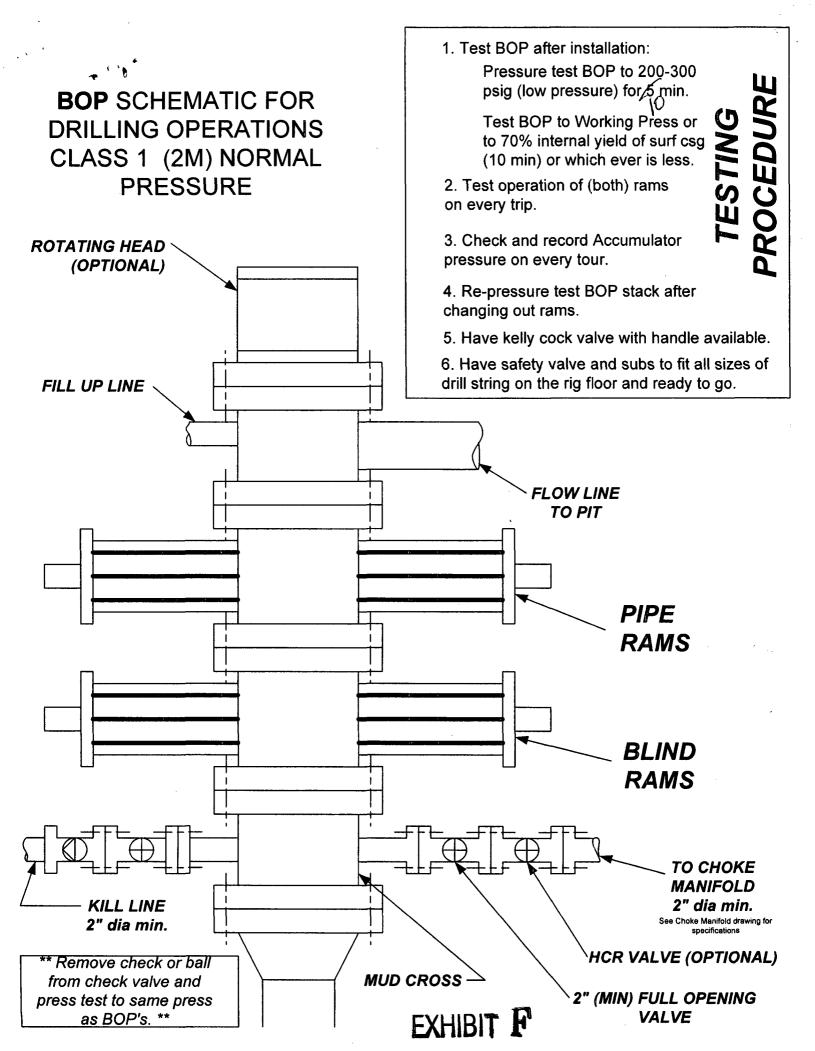
# 7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Gary Hancock	Drilling Engineer	505-486-1201	505-486-1201
John Egelston	Drilling Engineer	505-564-6734	505-330-6902
Dennis Elrod	Drilling foreman	505-486-6460	505-326-2024
Red Meek	Project Geologist	817-885-2800	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JΕ 12/14/05

<sup>\*</sup> Primary Objective \*\* Secondary Objective

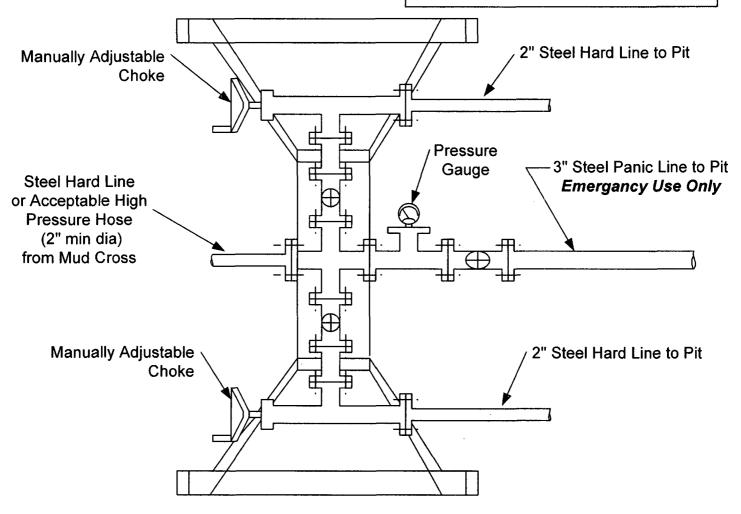
<sup>\*\*\*\*</sup> Maximum anticipated BHP should be <2,000 psig (<0.30 psi/ft) \*\*\*\*\*

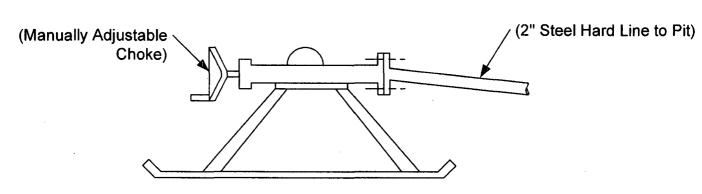


# CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

- 1. Stake all lines from choke manifold to pit.
- 2. Pressure test choke monifold after installation.
- 3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

# TESTING PROCEDURE







0

Field: Otero Chacra & Blanco Mesa Verde

Site: SEC 18-T27N-R8W Well: FLORANCE #73

Wellpath: OH Plan: Plan #1



	SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target		
1 2 3 4 5	0.00 460.00 1098.86 3847.77 4486.63 7040.63	0.00 0.00 12.78 12.78 0.00 0.00	0.00 0.00 43.38 43.38 0.00 0.00	0.00 460.00 1093.58 3774.42 4408.00 6962.00	0.00 0.00 51.56 493.44 545.00 545.00	0.00 0.00 48.72 466.28 515.00 515.00	0.00 0.00 2.00 0.00 2.00 0.00	0.00 0.00 0.00 0.00 180.00	0.00 0.00 70.94 678.89 749.83 749.83	7" CASING POINT		

TARGET DETAILS											
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape					
HARDLINE 7" CASING POINT PBHL	0.00 4408.00 6962.00	645.00 545.00 545.00	515.00 515.00 515.00	2030587.510 2030487.510 2030487.510	532046,321 532046,321 532046,321	Point Point Circle (Radius: 100)					
WELL DETAILS											

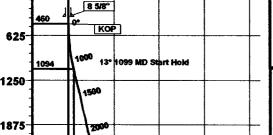
WELL DETAILS

Name +NJ-S +E/-W Northing **Easting** Latitude Longitude Slot FLORANCE #73 531531.321 36°34'43.600N 107°43'33.400W 0.00 0.00 2029942.510 NA

SITE DETAILS

SEC 18-T27N-R8W san juan new mexico

Ground Level: 6068.00 Positional Uncertainty: 0.00 Convergence: 0.06



FIELD DETAILS

Otero Chacra & Blanco Mesa Verde

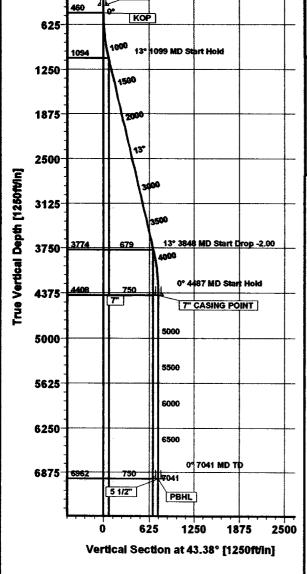
Geodetic System: US State Plane Coordinate System 1927 Effipsoid: NAD27 (Clarke 1866) Zone: New Mexico, Western Zone Magnetic Model: Igrt2005

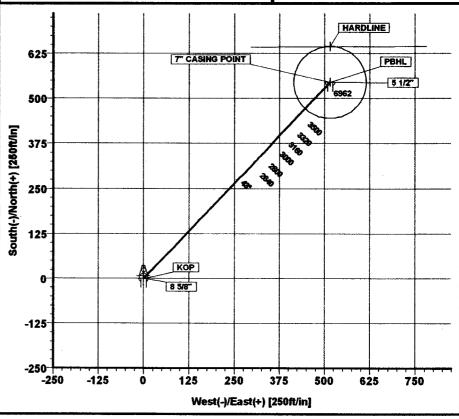
System Datum: Mean Sea Level Local North: Grid North



**Azimuths to Grid North** True North: -0.06° Magnetic North: 10.45°

Magnetic Field Strength: 51257nT Dip Angle: 63.46° Date: 2005/12/09 Model: Igrf2005





REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Centre: FLORANCE #73, Grid North Vertical (TVD) Reference: SITE 6080.00
Section (VS) Reference: Siot - (0.00N,0.00E)
Measured Depth Reference: SITE 6080.00
Calculation Method: Minimum Curvature