

AT5-07-69

OCD-HOBBS

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

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
POGO PRODUCING COMPANY (RICHARD WRIGHT 432-685-8140)

3a. Address P.O. BOX 10340  
MIDLAND, TEXAS 79702-7340

3b. Phone No. (include area code)  
432-685-8100

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
At surface 660' FNL & 330' FEL SECTION 17 T24S-R32E Unit A  
At proposed prod. zone 660' FNL & 1650' FWL SEC. 17 T24S-R32E HORIZIONAL

14. Distance in miles and direction from nearest town or post office\*  
Approximately 70 miles Southwest of Hobbs New Mexico

5. Lease Serial No.  
NM-16353

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No. 36213  
MESA VERDE "17" FEDERAL #1

9. API Well No.  
30-025-38221

10. Field and Pool, or Exploratory  
MESA VERDE-BONE SPRING

11. Sec., T. R. M. or Blk. and Survey or Area  
SECTION 17 T24S-R32E

12. County or Parish  
LEA

13. State  
New Mexico

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

16. No. of acres in lease  
320

17. Spacing Unit dedicated to this well  
120

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

19. Proposed Depth  
TVD--9800' ±  
MD--12,900' ±

20. BLM/BIA Bond No. on file  
NATION WIDE WYB-000238

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3602' GL

22. Approximate date work will start\*  
WHEN APPROVED

23. Estimated duration  
50 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*  
Title  
Agent

Name (Printed Typed)  
Joe T. Janica

Date  
11/20/06

Approved by (Signature)  
*/s/ James A. Amos*

Name (Printed Typed)  
*/s/ James A. Amos*

Date  
DEC 18 2006

Title  
ACTING 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 1 YEAR**

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)

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 850'. Run and set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" Light weight cement Mixed at 12.8#/Gal. + 6% Gel, + 5% salt, yield 1.89 CU FT/SX., tail in with 200 Sx. of Class "C" + 2% CaCl, mixed at 14.8#/Gal with a yield of 1.32 CU FT/Sx. Circulate cement to surface.
2. Drill 12½" hole to 4600'. Run and set 4600' of 9 5/8" 36# J-55 ST&C casing. Cement with 1900 Sx. of Light Weight cement + 6% Gel, + 5% Salt, mixed at 12.4#/Gal., yield 2.09 CU FT/SX., tail in with 200 Sx. of Class "C" cement + 1% CaCl, mixed at 14.8#/Sx. with a yield of 1.32 CU FT/SX. Circulate cement to surface.
4. Drill 8 ½" hole to 9950'. Run Gyro, pull out of hole and run open hole logs. Plug back to 9150' for kick off point. Drill curve and lateral with a 8½" bit then reduce hole to 7 7/8" and drill to a measured depth of 12,900'±. Run and set 5½" casing as follows: 3900' of 5½" 17# P-110 BT&C , 9000' of 5½" 17# P-110 LT&C casing. Cement with 1400 Sx. of Class "H" cement + additives, mixed at 15.6#/Gal and a yield of 1.18 CU FT/Sx. Estimate top of cement 4000' from surface.

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**LONG's METHOD OF SURVEY COMPUTATION****OBLIQUE CIRCULAR ARC INTERPOLATION**

0	MD OF INTERPOLATION DEPTH,(feet)
#N/A	TVD COORDINATE OF THE DEPTH (feet)
#N/A	N/S COORDINATE OF DEPTH (feet)
#N/A	E/W COORDINATE OF DEPTH (feet)

3 D DISTANCE BETWEEN STATION A AND STATION B

**DISTANCE TABLE**

STATION A	STATION B
0.00	ft

Calculator =

**TABLE OF SURVEY STATIONS**

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+S- ft	E+W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	9321.00	9321.00	0.00	0.00	-
2	100	12	270	9421.00	9420.27	0.00	-10.43	12.00
3	100	24	270	9521.00	9515.20	0.00	-41.28	12.00
4	100	36	270	9621.00	9601.65	0.00	-91.19	12.00
5	100	48	270	9721.00	9675.83	0.00	-157.98	12.00
6	100	60	270	9821.00	9734.50	0.00	-238.73	12.00
7	100	72	270	9921.00	9775.10	0.00	-329.92	12.00
8	100	84	270	10021.00	9795.85	0.00	-427.56	12.00
9	50	90	270	10071.00	9798.46	0.00	-477.46	12.00
10	100	90	270	10171.00	9798.46	0.00	-577.46	0.00
11	100	90	270	10271.00	9798.46	0.00	-677.46	0.00
12	100	90	270	10371.00	9798.46	0.00	-777.46	0.00
13	100	90	270	10471.00	9798.46	0.00	-877.46	0.00
14	100	90	270	10571.00	9798.46	0.00	-977.46	0.00
15	100	90	270	10671.00	9798.46	0.00	-1077.46	0.00
16	100	90	270	10771.00	9798.46	0.00	-1177.46	0.00
17	100	90	270	10871.00	9798.46	0.00	-1277.46	0.00
18	100	90	270	10971.00	9798.46	0.00	-1377.46	0.00
19	100	90	270	11071.00	9798.46	0.00	-1477.46	0.00
20	100	90	270	11171.00	9798.46	0.00	-1577.46	0.00
21	100	90	270	11271.00	9798.46	0.00	-1677.46	0.00
22	100	90	270	11371.00	9798.46	0.00	-1777.46	0.00
23	100	90	270	11471.00	9798.46	0.00	-1877.46	0.00
24	100	90	270	11571.00	9798.46	0.00	-1977.46	0.00
25	100	90	270	11671.00	9798.46	0.00	-2077.46	0.00
26	100	90	270	11771.00	9798.46	0.00	-2177.46	0.00
27	100	90	270	11871.00	9798.46	0.00	-2277.46	0.00
28	100	90	270	11971.00	9798.46	0.00	-2377.46	0.00
29	100	90	270	12071.00	9798.46	0.00	-2477.46	0.00
30	100	90	270	12171.00	9798.46	0.00	-2577.46	0.00
31	100	90	270	12271.00	9798.46	0.00	-2677.46	0.00
32	100	90	270	12371.00	9798.46	0.00	-2777.46	0.00
33	100	90	270	12471.00	9798.46	0.00	-2877.46	0.00
34	100	90	270	12571.00	9798.46	0.00	-2977.46	0.00
35	100	90	270	12671.00	9798.46	0.00	-3077.46	0.00
36	100	90	270	12771.00	9798.46	0.00	-3177.46	0.00
37	100	90	270	12871.00	9798.46	0.00	-3277.46	0.00
38	22	90	270	12893.00	9798.46	0.00	-3299.46	0.00

DISTRICT I  
1625 N. FRENCH DR., ROSES, NM 88240

DISTRICT II  
1301 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

State of New Mexico  
Energy, Minerals and Natural Resources Department

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 <b>30-025-38221</b>	Pool Code 96229	Pool Name MESA VERDE - BONE SPRING
Property Code <b>36213</b>	Property Name <b>MESA VERDE 17 FEDERAL</b>	Well Number <b>114</b>
OGRID No. 017891	Operator Name <b>POGO PRODUCING COMPANY</b>	Elevation <b>3602'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	24-S	32-E		660	NORTH	330	EAST	LEA

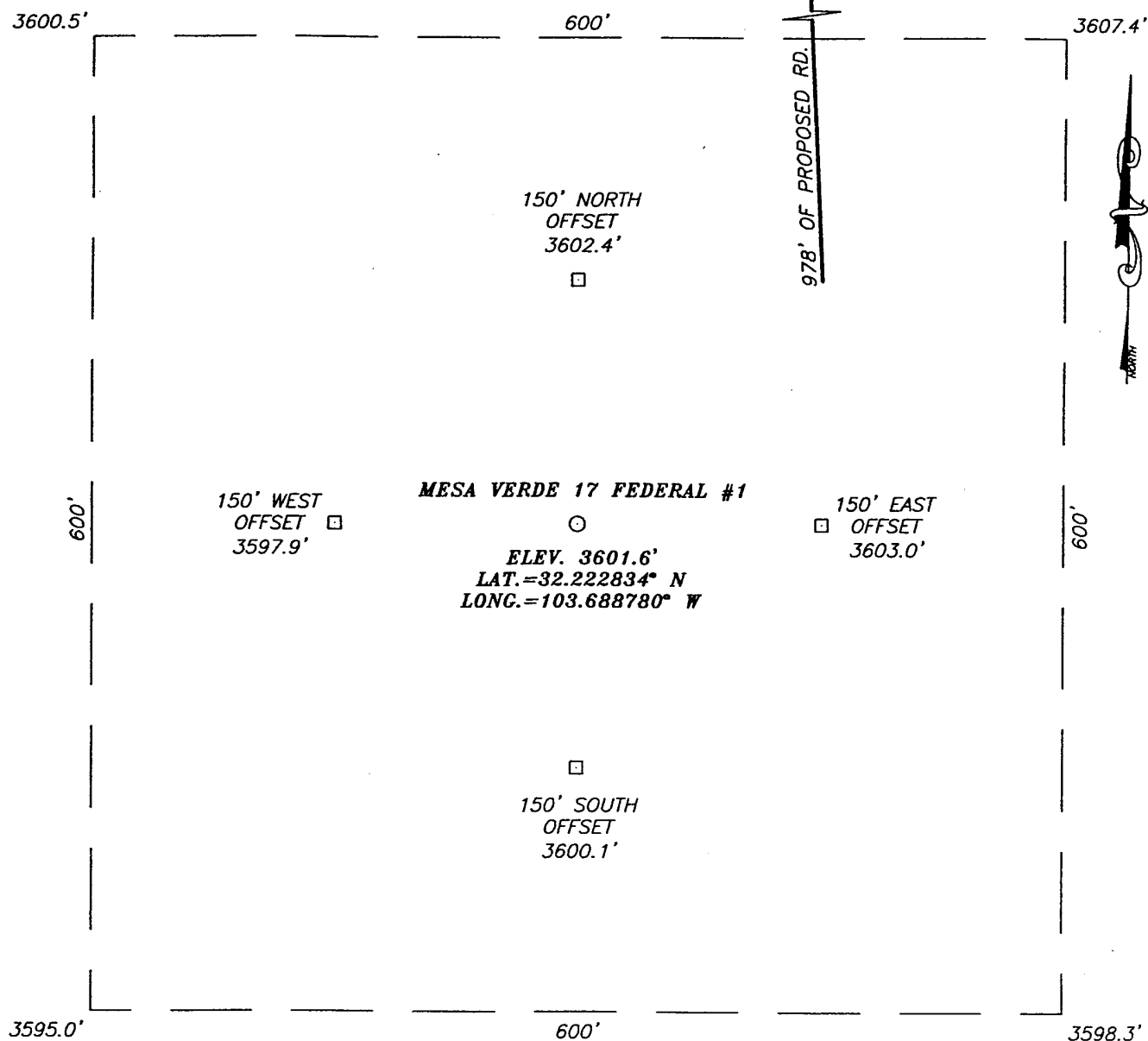
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	17	24-S	32-E		660	NORTH	1650	WEST	LEA
Dedicated Acres 120	Joint or Infill	Consolidation Code	Order No.						

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

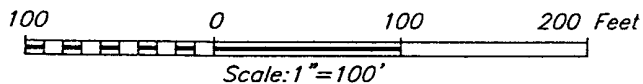
<p>NM-16353</p> <p>GRID. AZ - 269°19'57"</p> <p>HORIZ. DIST. - 3311.9'</p> <p>SEE DETAIL</p> <p>1650'</p> <p>330'</p> <p>B.H.</p> <p>S.L.</p> <p>PROJECT AREA</p> <p>PRODUCING AREA</p> <p>GEODETC COORDINATES NAD 27 NME SURFACE HOLE LOCATION Y=445383.8 N X=699325.2 E LAT.=32.222834° N LONG.=103.688780° W</p> <p>BOTTOM HOLE LOCATION Y=445345.2 N X=696014.2 E</p> <p>DETAIL</p> <p>3600.5'</p> <p>3607.4'</p> <p>600'</p> <p>3595.0'</p> <p>3598.3'</p> <p>EXHIBIT "A"</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>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.</p> <p><i>Joe T. Janica</i> Signature Date 11/20/06 Joe T. Janica Printed Name Agent</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>NOVEMBER 1, 2006</p> <p>Date Surveyed Signature &amp; Seal of Professional Surveyor GARY EIDSON 11/7/06 06.11.1736 Certificate No. GARY EIDSON 12641</p>
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**SECTION 17, TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.,**  
 LEA COUNTY, NEW MEXICO



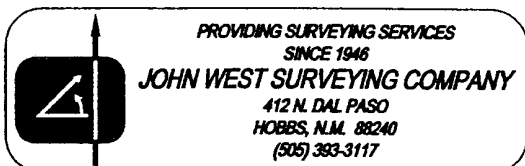
**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF ST. HWY. #128 (JAL HWY.) AND CO. RD. #786 (BUCK JACKSON RD.) GO SOUTHEAST ON ST. HWY. #128 FOR APPROX. 0.5 MILES. TURN LEFT AND GO NORTHEAST APPROX. 1.5 MILES TO THE MESA VERDE 8 FEDERAL #2 WELL. THIS LOCATION IS APPROX. 0.2 MILES SOUTH.



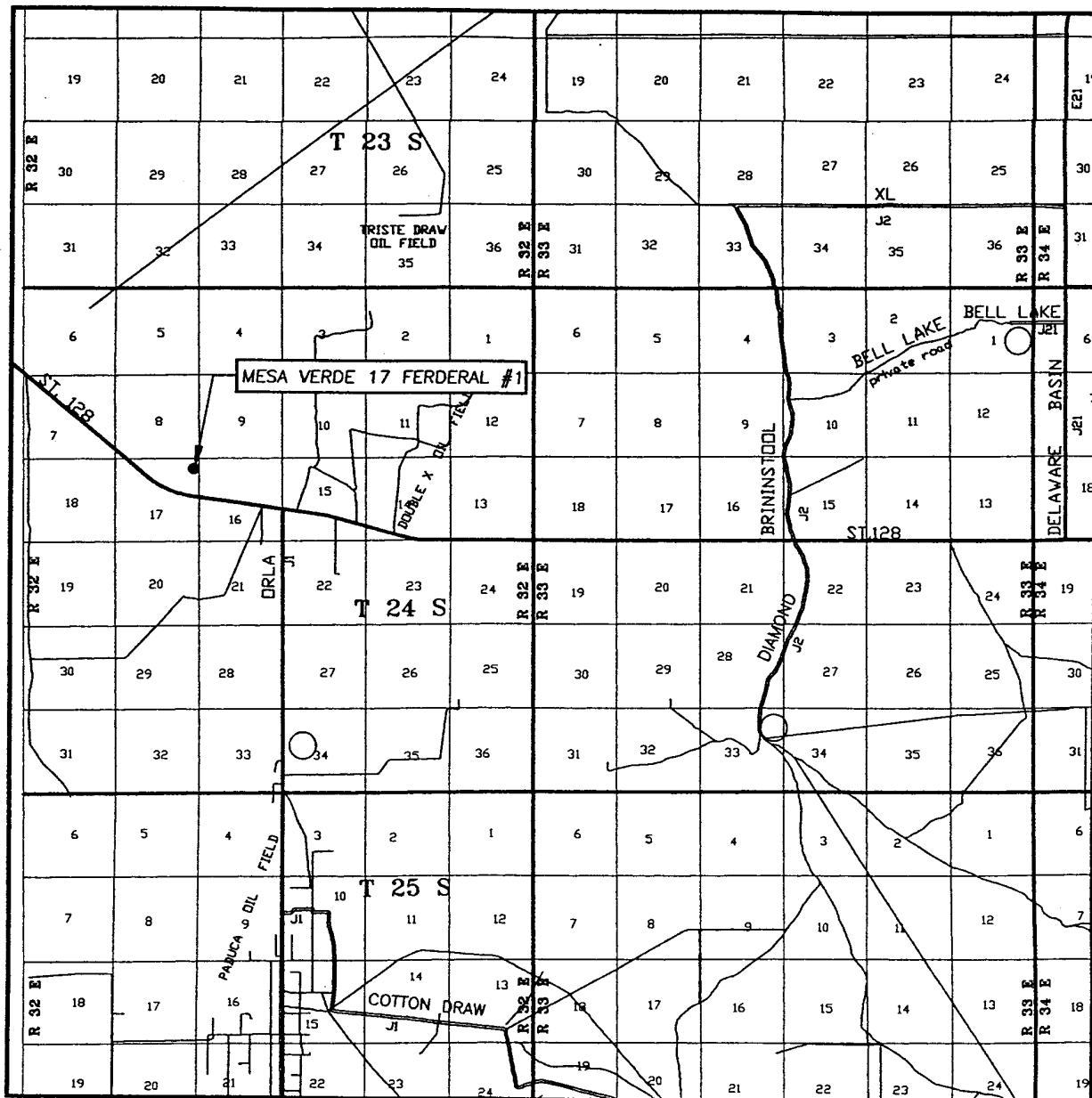
**POGO PRODUCING COMPANY**

MESA VERDE 17 FEDERAL #1 WELL  
 LOCATED 660 FEET FROM THE NORTH LINE  
 AND 330 FEET FROM THE EAST LINE OF SECTION 17,  
 TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.,  
 LEA COUNTY, NEW MEXICO.



Survey Date: 11/1/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.1736	Dr By: LA
Date: 11/7/06	Disk: CD#5
06111736	Scale: 1"=100'

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 17 TWP. 24-S RGE. 32-E

SURVEY N.M.P.M.

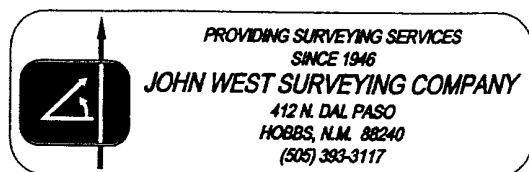
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 660' FNL & 330' FEL

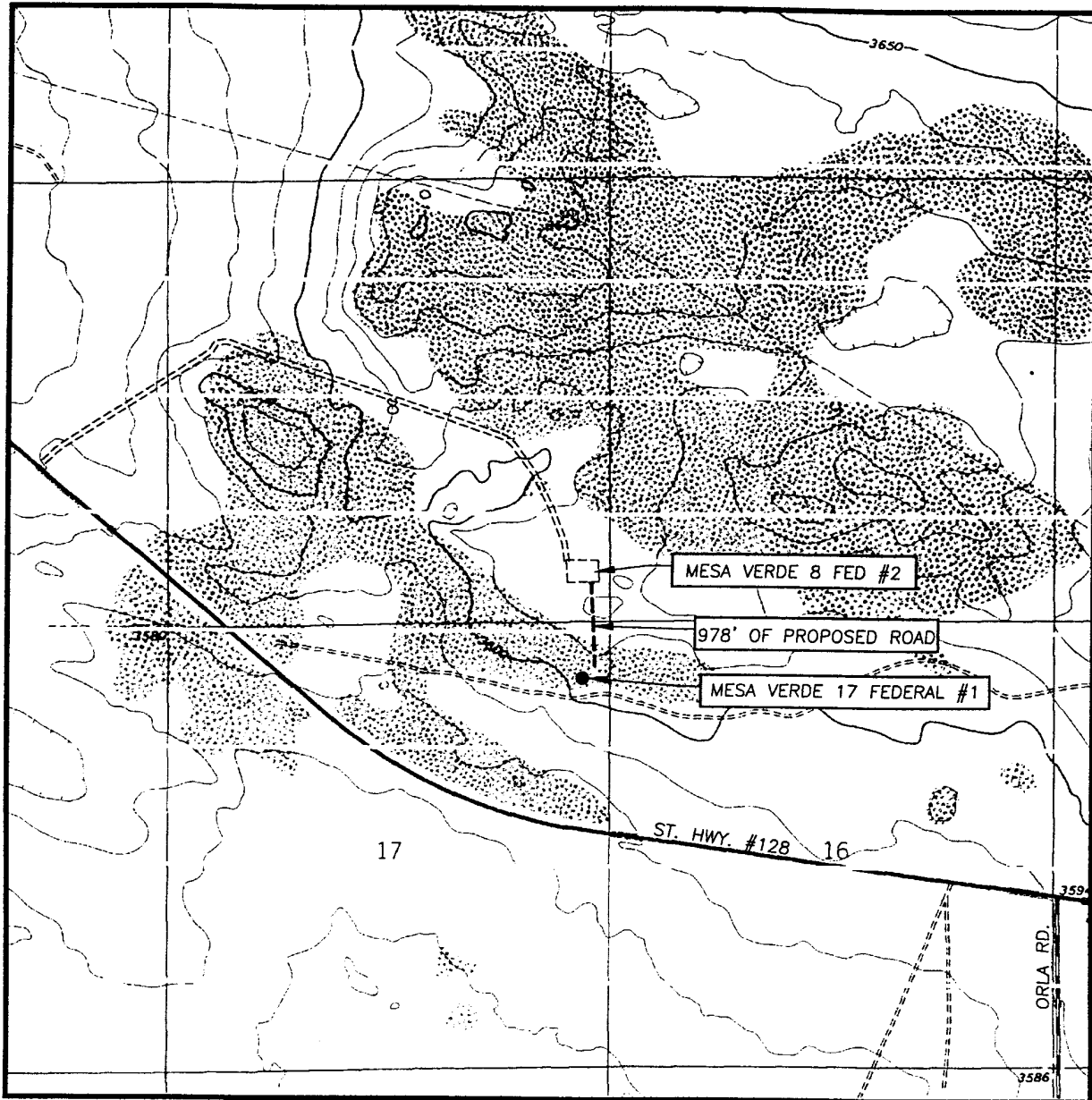
ELEVATION 3602'

POGO  
OPERATOR PRODUCING COMPANY

LEASE MESA VERDE 17 FEDERAL



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
PADUCA BREAKS NW, N.M. - 10'

SEC. 17 TWP. 24-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

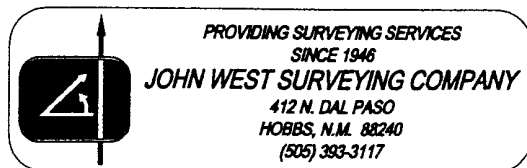
DESCRIPTION 660' FNL & 330' FEL

ELEVATION 3602'

OPERATOR POGO PRODUCING COMPANY

LEASE MESA VERDE 17 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
PADUCA BREAKS NW, N.M.



# APPLICATION TO DRILL

POGO PRODUCING COMPANY  
MESA VERDE "17" FEDERAL #1 H-2  
UNIT "A" SECTION 17  
T24S-R32E LEA CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location of well: 660' FNL & 330' FEL SECTION 17 T24S-R32E LEA CO. NM
2. Ground Elevation above Sea Level: 3602' GL
3. Geological age of surface formation: Quaternary Deposits:
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
5. Proposed drilling depth: MD-12,900'± TVD-9800'±
6. Estimated tops of geological markers:

Basal Anhydrite	4482'	Brushy Canyon	6906'
Delaware Lime	4712'	Bone Spring	8576'
Bell Canyon	4734'	1st Bone Spring Sd.	9550'
Cherry Canyon	5590'	TVD	9950'
7. Possible mineral bearing formations:

Bone Spring	Oil
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## 8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-850'	13 3/8"	48#	8-R	ST&C	H-40
12½"	0-4600'	9 5/8"	36#	8-R	ST&C	J-55
8½" & 7 7/8"	0-12,900'	5½"	17#	8-R BUTT	LT&C	P-110



# APPLICATION TO DRILL

POGO PRODUCING COMPANY  
MESA VERDE "17" FEDERAL #1 H 22  
UNIT "A" SECTION 17  
T24S-R32E LEA CO. NM

## 9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Run and set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" cement + 6% Gel, + 5% Salt, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement.
9 5/8"	Intermediate	Set 4600' of 9 5/8" 36# J-55 ST&C casing. Cement with 1900 Sx. of Class "C" Lite cement + 6% Gel, + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl. Circulate cement to surface.
5 1/2"	Production	Set 12,900' of 5 1/2" casing as follows: 3900' of 5 1/2" 17# P-110 BT&C, 9000' of 5 1/2" 17# J-55 LT&C casing. Cement with 1400 Sx. of Class "H" cement + additives, mixed at 15.5#/Gal estimate top of cement 4000' from 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, middle blind rams, and bottom pipe rams. The B.O.P. will be nipped up on the 9 5/8" 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 operated when the drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected in this well.

## 11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-850'	8.4-8.7	29-36	NC	Fresh water Spud Mud add paper to control seepage.
850'-4600'	10.0-10.2	29-38	NC	Brine water use paper to control seepage and use high viscosity sweeps to clean hole.
4600-12,900'	8.4-8.7	29-40	NC.	Fresh water use high viscosity sweeps to clean hole, If WL is required use a Dris-Pac System to control WL.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
MESA VERDE "17" FEDERAL #1 H<sup>2</sup><sub>2</sub>  
UNIT "A" SECTION 17  
T24S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Run Gyro, then run Dual/Laterolog, SNP, LDT, CDL, Gamma Ray, Caliper from 9950' back to 9 5/8" casing shoe. Run Gamma Ray, Neutron from 9 5/8" casing shoe back to surface.

B. Rig up mud logger on hole at 4600' and keep on hole to TD.

C. No DST's or Cores are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H<sup>2</sup>S in this area. If H<sup>2</sup>S 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 5000 PSI, and Estimated BHT 190°.

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 50 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 potentialized as an oil well.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsack and/or wind streamers
  - A. Windsack at mudpit area should be high enough to be visible.
  - B. Windsack at briefing area should be high enough to be visible.
  - C. There should be a windsack at entrance to location.
4. Condition Flags and Signs
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
  - A. See exhibit "E"
6. Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
  - A. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If location is near any dwelling a closed D.S.T. will be performed.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects  $H_2S$  has on tubular goods and other mechanical equipment.
9. If  $H_2S$  is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with  $H_2S$  scavengers if necessary.

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-144  
March 12, 2004

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

For drilling and production facilities, submit to  
appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe  
office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Pogo Producing Company Telephone: 432-685-8100 e-mail address: wrightc@pogoproducing.com  
Address: P. O. Box 10340, Midland, TX 79702-7340  
Facility or well name: Mesa Verde 17 Federal #1 API #: 30-025-38221 U/L or Qtr/Qtr A Sec 17 T 24S R 32E  
County: Lea Latitude 32.222834N Longitude 103.688780W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume  
16000 bbl

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high  
water elevation of ground water.)

Less than 50 feet	X	(20 points)	20
50 feet or more, but less than 100 feet		(10 points)	
100 feet or more		( 0 points)	

Wellhead protection area: (Less than 200 feet from a private domestic  
water source, or less than 1000 feet from all other water sources.)

Yes		(20 points)	
No	X	( 0 points)	0

Distance to surface water: (horizontal distance to all wetlands, playas,  
irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet		(20 points)	
200 feet or more, but less than 1000 feet		(10 points)	
1000 feet or more	X	( 0 points)	0

**Ranking Score (Total Points)**

20

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_ (3) Attach a general description of remedial action taken including remediation start date and  
end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results  
and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has  
been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 12/1/06

Printed Name/Title Cathy Wright, Sr. Eng Tech

Signature

*Cathy Wright*

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or  
otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or  
regulations.

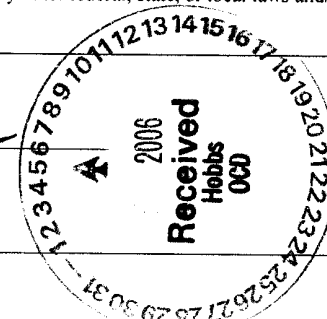
Approval:

Date: 12/22/06

Printed Name/Title CHRIS WILLIAMS (DIST. SUPERVISOR)

Signature

*Chris Williams*



Water  
ResourcesNational Water Information System:  
Web Interface

Data Category:

Ground Water

Geographic Area:

New Mexico

GO

## Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 321312103395601

Save file of selected sites to local disk for future upload

USGS 321312103395601 24S.32E.10.344333

Available data for this site

Ground-water: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

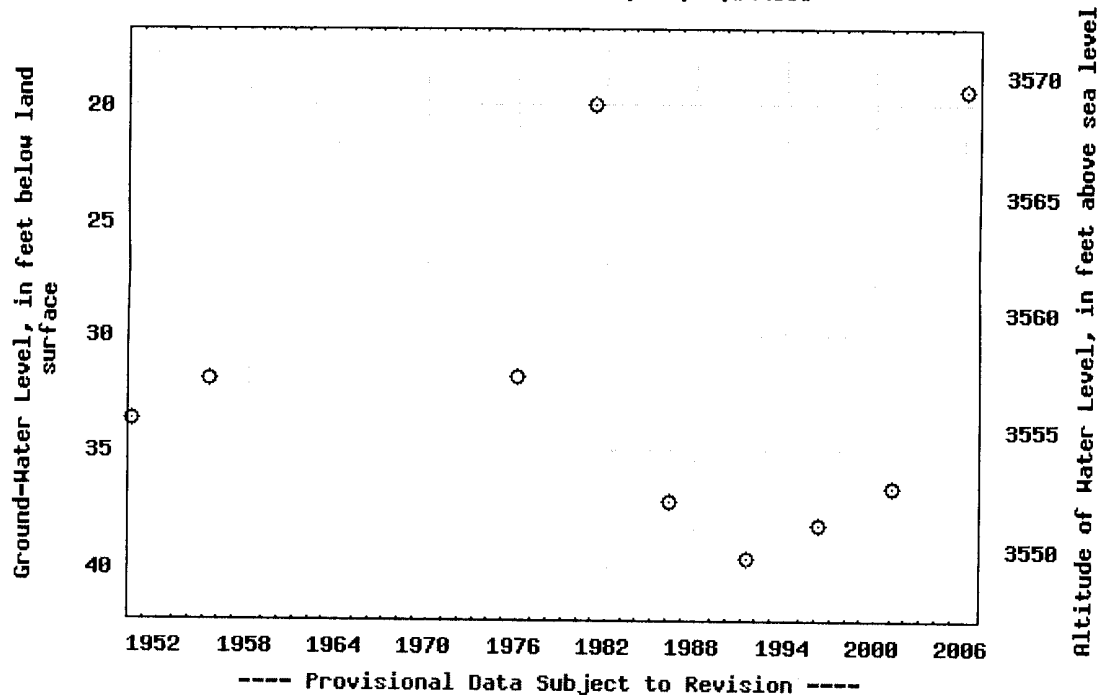
Latitude 32°13'12", Longitude 103°39'56" NAD27

Land-surface elevation 3,589.00 feet above sea level NGVD29

The depth of the well is 60 feet below land surface.

This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE  
DEPOSITS (110AVMB) local aquifer.**Output formats**[Table of data](#)[Tab-separated data](#)[Graph of data](#)[Reselect period](#)

USGS 321312103395601 24S.32E.10.344333



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

[Download a presentation-quality graph](#)[Questions about data?](#)[Top](#)[http://nwis.waterdata.usgs.gov/nm/nwis/gwlevels/?site\\_no=321312103395601&amp;](http://nwis.waterdata.usgs.gov/nm/nwis/gwlevels/?site_no=321312103395601&amp;)

12/1/2006

Water  
ResourcesNational Water Information System:  
Web Interface

Data Category:

Site Information

Geographic Area:

New Mexico

GO

## Site Map for New Mexico

USGS 321312103395601 24S.32E.10.344333

Available data for this site

Site map

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

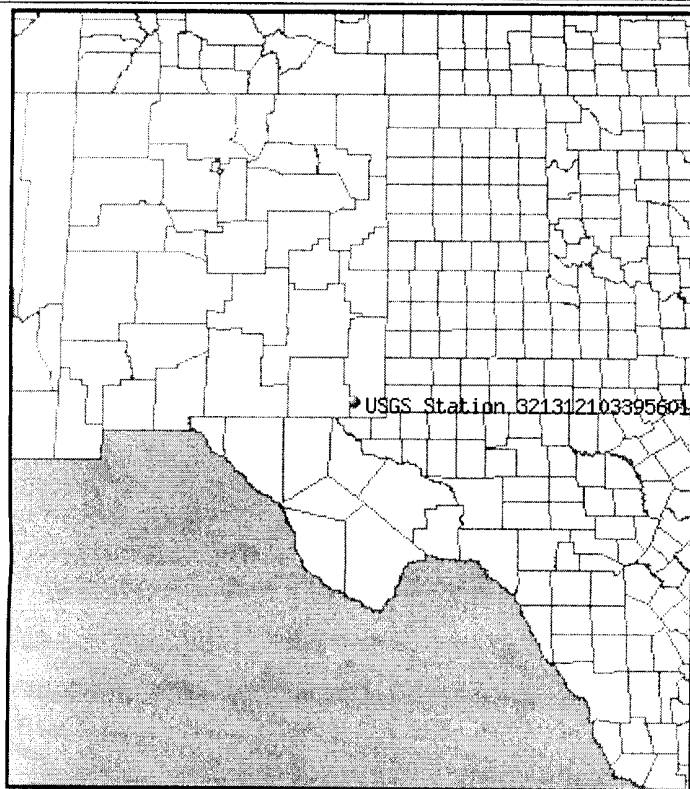
Latitude 32°13'12", Longitude 103°39'56" NAD27

Land-surface elevation 3,589.00 feet above sea level NGVD29

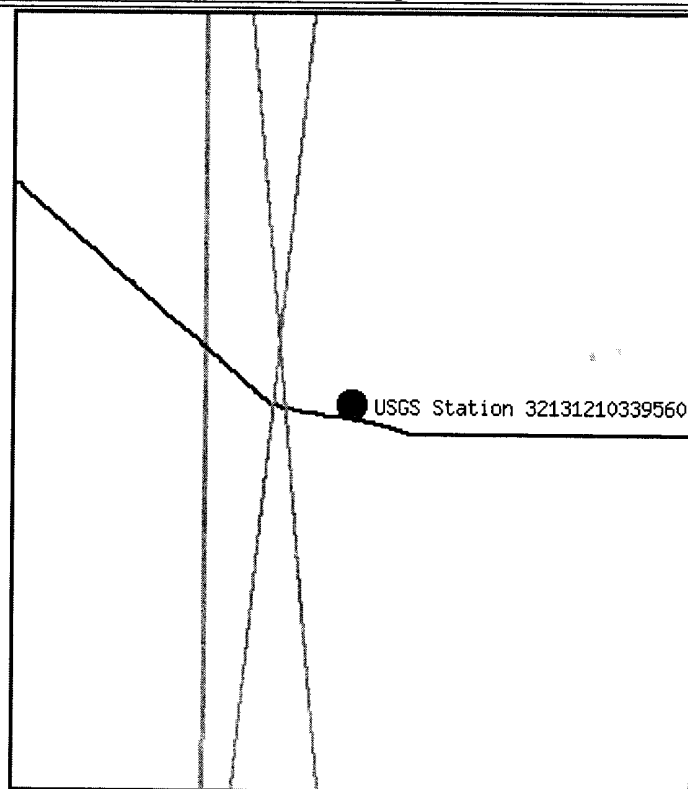
The depth of the well is 60 feet below land surface.

This well is completed in the ALLUVIUM, BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data?

Feedback on this web site

NWIS Site Inventory for New Mexico: Site Map

<http://waterdata.usgs.gov/nm/nwis/nwismap?>[Top](#)[Explanation of terms](#)

# Great Circle Calculator.

By Ed Williams

You need Javascript enabled if you want this page to do anything useful! For Netscape, it's under Options/Network Preferences/Languages.

## Compute true course and distance between points.

Enter lat/lon of points, select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

Note that if either point is very close to a pole, the course may be inaccurate, because of its extreme sensitivity to position and inevitable rounding error.

### Input Data

Lat1		Lon1	
32.222834	N ▾	103.688780	W ▾
Lat2		Lon2	
32:13:12	N ▾	103:39:56	W ▾

### Output

Course 1-2	Course 2-1	Distance
98.2015718	278.213954	1.19106452

Distance Units: nm ▾ Earth model: Spherical (1'=1nm) ▾

Compute

Reset

---

## Compute lat/lon given radial and distance from a known point

Enter lat/lon of initial point, true course and distance. Select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

Note that the starting point cannot be a pole.

### Input data

Lat1		Lon1	
0:00.00	N ▾	0:00.00	W ▾
Course 1-2		Distance 1-2	
360		0.0	