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DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210

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

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505 State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

Pool Name API Number Pool Code <u>30.025.37184</u> Property Code WILDCAT BONE SPRING **Property** Name Well Number 3 13272 PROXIMITY "30" FEDERAL Elevation OGRID No. **Operator** Name 17891 3579' POGO PRODUCING COMPANY Surface Location UL or lot No. Section Lot Idn Feet from the North/South line Feet from the East/West line County Township Range 1980 F 30 22 S 32 E 1980 NORTH WEST LEA Bottom Hole Location If Different From Surface Feet from the North/South line UL or lot No. Section Township Range Lot Idn Feet from the East/West line County Dedicated Acres Joint or Infill **Consolidation** Code Order No. 40 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 the the information contained herein is true and complete to the best of my knowledge and belief. ence Signature Joe T. 竹anica Ĺ _ 3576.8' **Printed** Name 3587.5'_ Agent Lat.: N32*21'51.6" Long.: W103*42'59.6" Title 1980' 02/21/05Date 3581.1 **`**35773.9' 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 supervison, and that the same is true and correct to the best of my belief. JANUARY 20, 2005 Date Surveyed Signature & Seal of Nes Professional No EXHIBIT "A" 7977 Certifi e, PROFESSIONAL





PROXIMITY "30" FEDERAL #3 Located at 1980' FNL and 1980' FWL Section 30, Township 22 South, Range 32 East, N.M.P.M., Lea County, New Mexico.

	P.O. Box 1786	W.O. Number: 5032AA - KJG CD#1	POGO
GIITVAV G	1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office		PRODUCING
focused on excellence in the oilfield	(505) 392-3074 - Fax basinsurveys.com	Scale: 1" = 2000' Date: 01-25-2005	COMPANY



APPLICATION TO DRILL

POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

- 1. Location: 1980' FNL & 1980' FWL SECTION 30 T22S-R32E LEA CO. NM
- 2. Elevation above sea level: 3579' GR.
- 3. Geologic name of surface formation:
- 4. <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5. Proposed drilling depth: 8700'

6. Estimated tops of geological markers:

Delaware Lime	4602'	Brushy Canyon	71 <u>51</u> '
Ramsay Sand	4631'	Bone Spring	8476'
Cherry Canyon	5330'	TD.	8700 '

7. Possible mineral bearing formation:

Brushy CAnyon	0il
Bone Spring	0i1

8. Casing program:

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<u>Hole size</u>	Interval	OD casing	Weight	Thread	Collar	Grade
25''	0-40	20''	- NA	NA	NA	Conductor
17 ¹ 2''	0-850'	13 3/8"	48 <i>#</i>	8-R	ST&C	H-40
11"	0-4400'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8700'	5 ¹ ₂ ''	17 & 15.5#	8-R	LT&C	J-55

POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

. . .

9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 700 Sx. of 65/35/6 Class "C" POZ/Bel, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
8 5/8"	Intermediate	Set 4400' of 8 5/8" $32\#$ J-55 ST&C casing. Cement with 1000 Sx. of 65/35/6 Class "C" POZ/Gel, + 5% Sxlt. Tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulage cement to surface.
5 ¹ 2''	Production	Set $8700'$ of $5\frac{1}{2}'$ casing as follows: $2700'$ of $5\frac{1}{2}''$ $17\#$ J-55 LT&C, 5000' of $5\frac{1}{2}''$ 15.5# J-55 LT&C, 1000' of $5\frac{1}{2}''$ 17# J-55 LT&C casing. Cement in 3 stages, DVToosl at 5800'& 3700'±. CMT 1st stage/W 650 Sx. of Class "H"cement + additives, CMT 2nd stage with 600 Sx. of Class "C" CMT + 8# Gilsonite/SX. CMT 3rd stage with 400 Sx. of 65/35/6 Class "C" POZ/Gel, tail in with 100 Sx. of Class "C" CMT + 1% CaCl, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper head instead of an annular preventor, blind rams, and pipe rams. This B.O.P. stack is being used because of Substructure height limitations of the drilling rig being used to drill this well. Pressures encountered during drilling are not expected to exceed 2000 PSI at total depth. Pogo requests permission to 3rd party test of the B.O.P., after setting intermediate casing at 4400'. The B.O.P. will be tested acccording to API soecifications. Exhibit "E-1" shows a manually operated choke manifold, as no remote B.O.P. equipment will be necessary.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-850'	8.4-8.7	29-32	NC	Fresh water Spur Mud add paper to control seepage.
850-4400'	10.1-10.2	29-38	NC	Brine water add paper to control seepage add Lime to control pH, use high viscosity sweeps to clean hole.
4400-8700 '	8.4-8.7	29-38	NC*	Fresh water using high viscosity sweeps to clean hole.

* Water loss may have to be used while drilling the

pay interval'in order to protect from formation damage.

Water loss may have to be used in order to run logs, and casing.

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 PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Induction, SNP, LDT, Camma Ray, Caliper from TD. back to 8 5/8" casing shoe.

B. Cased hole logs: Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.

C. Mud logger on hole from 4400' to TD.

D. No cores or DST's are planned at this time.

13. 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 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 <u>1800</u> PSI, and Estimated BHT <u>140°</u>.

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 <u>26</u> days. If production casing is run then an additional <u>30</u> 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 <u>Bone Spring</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazzards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock 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, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
 - A. See exhibit "E" & "E-1"

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 the location is near to a dwelling a closed DST will be performed.

Page 3-A

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
- 9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H₂S scavengers if necessary.

Page3-B

SURFACE USE PLAN

POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

- 1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From Hobbs, New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico approximately 38 miles to the junction with CR-29, turn Left go 14± miles to Mills Ranch road, turn Left go 1.6± miles cross cattle guard thrn Right follow section line .75 miles turn Left go .3 miles to location.
 - C. Exhibit "C" shows roads to proposed location.
- 2. PLANNED ACCESS ROADS: Approximately 1+ miles of road will be constructed.
 - A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
 - B, Gradient of all roads will be less than 5.00%.
 - C. If turn-outs are necessary they will be constructed.
 - D. If needed roads will be surfaced with a mimimum of 4" of caliche. This material will be obtained from a local source.
 - E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.
 - F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilaze low water crossings for drainage as required by topography.
- 3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"
 - A. Water wells None known

B. Disposal wells	- One approximately .8 miles South Southwest.
C. Drilling wells	- none known
D. Producing wells	- As shown on Exhibit "A-1"
E. Abandoned wells	- As shown on Exhibit "A-1"

SURFACE USE PLAN

POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

- 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. If additional routes are needed a Sundry report will be submitted to obtain approval for flowlines and/or powerlines.
- 5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the 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 drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

A. Drill cuttings will be disposed of in the reserve pits.

- B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill:
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

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

POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

- 9. WELL SITE LAYOUT
 - A. Exhibit "D" shows the proposed well site layout.
 - B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
 - C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
 - 12 por c-144
 - D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
 - E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B 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 erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

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

SURFACE USE PLAN

POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes with a slight dip to the West. The deep sandy soil supports shinnery oak, native grasses, and an occasional mescuite tree.
- 3. The surface is owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used for the grazing of livestock and the production of Oil & Gas.
- C. An archaeological survey will be conducted on the location and roads the results will be filed in report form and filed with the Bureau of Land Management Field Office in Carlsbad New Mexico.
- D. There are no dwellings near to this location.
- 12. OPERATIOR'S REPRESENTIVES:

Before Construction:

During and after Construction:

TIERRA EXPLORATION, INC.POGO PRODUCING COMPANYP.O. BOX 2188P.O. BOX 10340HOBBS, NEW MEXICO 88241MIDLAND, TEXAS 79702-7340OFFICE Ph. 505-391-8503RICHARD WRIGHTJOE T. JANICAOFFICE Ph. 432-685-8140

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and the access roads, and that I am familiar with the conditions which 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 POGO PRODUCING COMPANY it's contractors/subcontractors is in confirmity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false report.

Joe T. Janica NAME 02/21/05 DATE TITLE Aven

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CapStar Drilling, Inc. LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS





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

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POGO PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM



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CHOKE MANIFOLD & CLOSING UNIT POG PRODUCING COMPANY PROXIMITY "30" FEDERAL # 3 UNIT "F" SECTION 30 T22S-R32E LEA CO. NM

EXHIBIT "E-1"

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 Fc office

Pit or Below-Grade Tank Registration or Closure

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

Type of action: Registration of a pit or below-grade tank 🔀 Closure of a pit or below-grade tank 🔲

Operator:	Pogo Produc	ing Company	432-685-8100 Telephone:	e-mail address:	rightc@pogoproducing.com
Address:	P.O. Box 10	340, Midland, TX	K 79702-7340		
Facility or v	vell name Proxim	ity 30 Fed #3	API #: 30.025.37184	U/L or Qtr/Qtr F	Sec <u>30 T 22 R 32</u>
County:	Lea	Latitude 32 • 21 • 51 . 61	Substitute $103:42:59$.	6WNAD: 1927 K 1	983 Surface Owner Federal XX State Private Indian

<u>Pit</u>	Below-grade tank	
Type: Drilling X Production Disposal	Volume:bbl Type of fluid:	
Workover 🔲 Emergency 🗌	Construction material:	
Lined 🖾 Unlined 🗔	Double-walled, with leak detection? Yes 🗌 If not,	explain why not.
Liner type: Synthetic X Thickness <u>12</u> mil Clay Volume		
<u>16000</u> ьы		
Death to ensued water (continued distance from bottom of the second birth	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)
water elevation of ground water.)	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No hL	(Optaints)
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)
ingaton canais, titoles, and potenniar and epicinical watercourses.)	1000 feet or more	(<u>0 points</u>) O
	Ranking Score (Total Points)	
	Nauking Score (10tar 10tills)	0

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 (2), a general permit [], or an (attached) alternative OCD-approved plan []. Date: 02/28/05

Printed Name/Title_ Cathy Wright, Sr Eng Tech

Signature

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: DateAPR 1 1 2005		
Printed Name/Title	PETROLEUM ENGINEER	Signature



Questions about dataNew Mexico NWISWeb Data InquiriesFeedback on this websiteNew Mexico NWISWeb Maintainer

<u>Top</u> Explanation of terms

http://nwis.waterdata.usgs.gov/nm/nwis/gwlevels/?site_no=322314103384301

Water Resources

Data Category:	Geographic Area:	
Site Information	New Mexico	go
-		

Site Map for New Mexico USGS 322314103384301 22S.32E.14.32322

Available data for this site site map GO Lea County, New Mexico Hydrologic Unit Code Latitude 32°23'14", Longitude 103°38'43" NAD27 Gage datum 3,717.00 feet above sea level NGVD29 Site map. Location of the site in New Mexico. 🕑 USCS Station 322314103384301 USGS Station 3223141033843 ZOOM IN <u>2X, 4X, 6X, 8X</u>, or ZOOM OUT <u>2X, 4X. 6X. 8X</u>. Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data <u>New Mexico NWISWeb Data Inquiries</u> Feedback on this website<u>New Mexico NWISWeb Maintainer</u> NWIS Site Inventory for New Mexico: Site Map http://waterdata.usgs.gov/nm/nwis/nwismap?

Retrieved on 2005-02-25 17:46:41 EST Department of the Interior, U.S. Geological Survey USGS Water Resources of New Mexico Privacy Statement || Disclaimer || Accessibility || FOIA 1.17 0.93 nadww01 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			
32:23:14 N 💌	103:38:43 W 💌			
Lat2	Lon2			
32:21:51.6 N 💌	103:42:59.6 W			

Innut Data

Output

Course 1-2	Course 2-1	Distance
249.200931	69.1627642	3.864156178

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.

mput data				
Lat1	Lat1 Lon1			
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Course 1-2		Distance 1-2		
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Innut data

POGO Producing Company Proximity 30 Federal #3 **Approximate Pit Dimensions**

F/30/22S/32E, Lea County, New Mexico



PIT NOTES:

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Pit will be lined with 12 mil Black plastic w/ UV protection.

Pit walls are 6 ft to 8 ft wide.

Pit is 8 ft deep below ground level plus 2 ft walls Pit walls are 2 ft above ground level.

Caliches mined from pit used to make Well Pad.

Fresh Water volume to ground level = ± 7950 bbls

Brine Water volume to ground level = ± 7730 bbls

12 inch Flare line laid on gradual descending graded ROW away from rig to avoid fluid trapping Fresh water well = (Nad 27) 32° 23' 14" N & 103° 38' 43" W "Published data"

This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls