n 3160-3
(ust 2007)

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No
NMLC030570A

6 If Indian, Allottee or Tribe Name

1a Type of Work: [X] DRILL [ ] REENTER

7 If Unit or CA Agreement, Name and No

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

8 Lease Name and Well No
STEVENS A #16H

2 Name of Operator
BURNETT OIL CO., INC

9 API Well No
30-015- 36146

3a Address 801 CHERRY STREET, STE 1500, FORT WORTH, TEXAS 76102

3b Phone No *(include area code)* (817) 332-5108

10 Field and Pool, or Exploratory
CEDAR LAKE YESO

4 Location of Well *(Report location clearly and in accordance with any State requirements *)*
At surface UNIT L, 2430' FSL, 350' FWL
At proposed prod zone UNIT M, 330' FSL, 330' FWL

11 Sec , T , R , M , or Blk and Survey or Area
SEC 13, T17S, R30E

14 Distance in miles and direction from nearest town or post office*
APPROXIMATELY 6 MILES EAST OF LOCO HILLS, NEW MEXICO

12 County or Parish: EDDY
13 State: NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any)	16 No of Acres in lease	17 Spacing Unit dedicated to this well
330	200	80
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	**19 Proposed Depth**	**20 BLM/BIA Bond No on file**
330'	4810' KB TVD 6664' MD	NMB #000197
21 Elevations (Show whether DF, KDB, RT, GL, etc)	**22 Approximate date work will start***	**23 Estimated duration**
3706' GR	FEBRUARY 15, 2008	25 DAYS TO DRILL

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 BLM

25 Signature	Name *(Printed/Typed)*	Date
Mark A. Jacoby	MARK A JACOBY	7/31/2007

Title: ENGINEERING MANAGER

Approved by *(Signature)*	Name *(Printed/Typed)* /s/ Don Peterson	Date 2/25/08
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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

APPROVAL FOR TWO YEARS

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

(Continued on page 2)

*(Instructions on page 2)

DISTRICT I
1625 N French Dr., Hobbs, 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Glorieta

API Number	Pool Code	Pool Name
30-015	96831	CEDAR LAKE YESO

Property Code	Property Name	Well Number
020145	STEVENS "A"	16
OGRID No	**Operator Name**	**Elevation**
00-3088	BURNETT OIL COMPANY	3706'

Surface Location

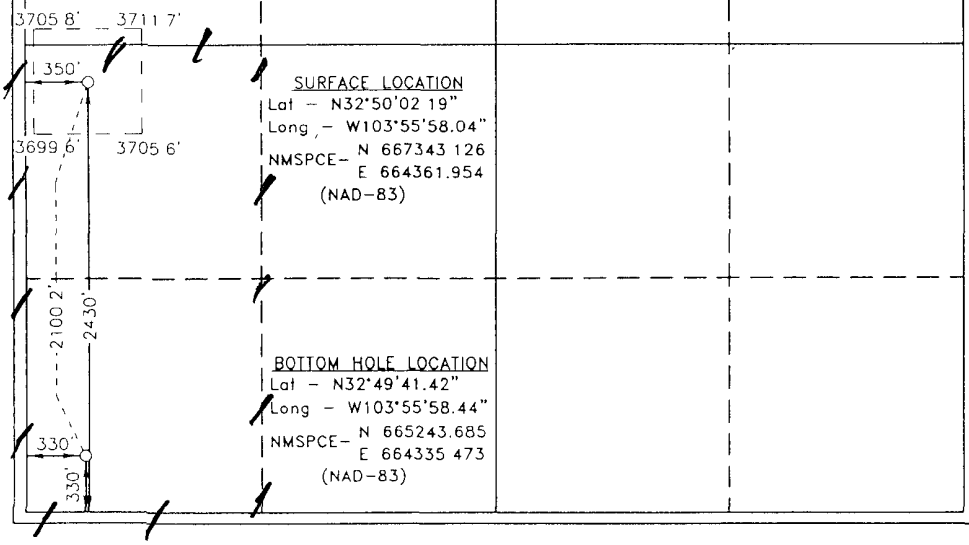
UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	17 S	30 E		2430	SOUTH	350	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	17 S	30 E		330	SOUTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

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



OPERATOR CERTIFICATION

I hereby certify that the information 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

Marla Jacoby 1/30/2008
Signature Date

Mark A. Jacoby
Printed Name

SURVEYOR CERTIFICATION

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

JANUARY 25, 2008
Date Surveyed

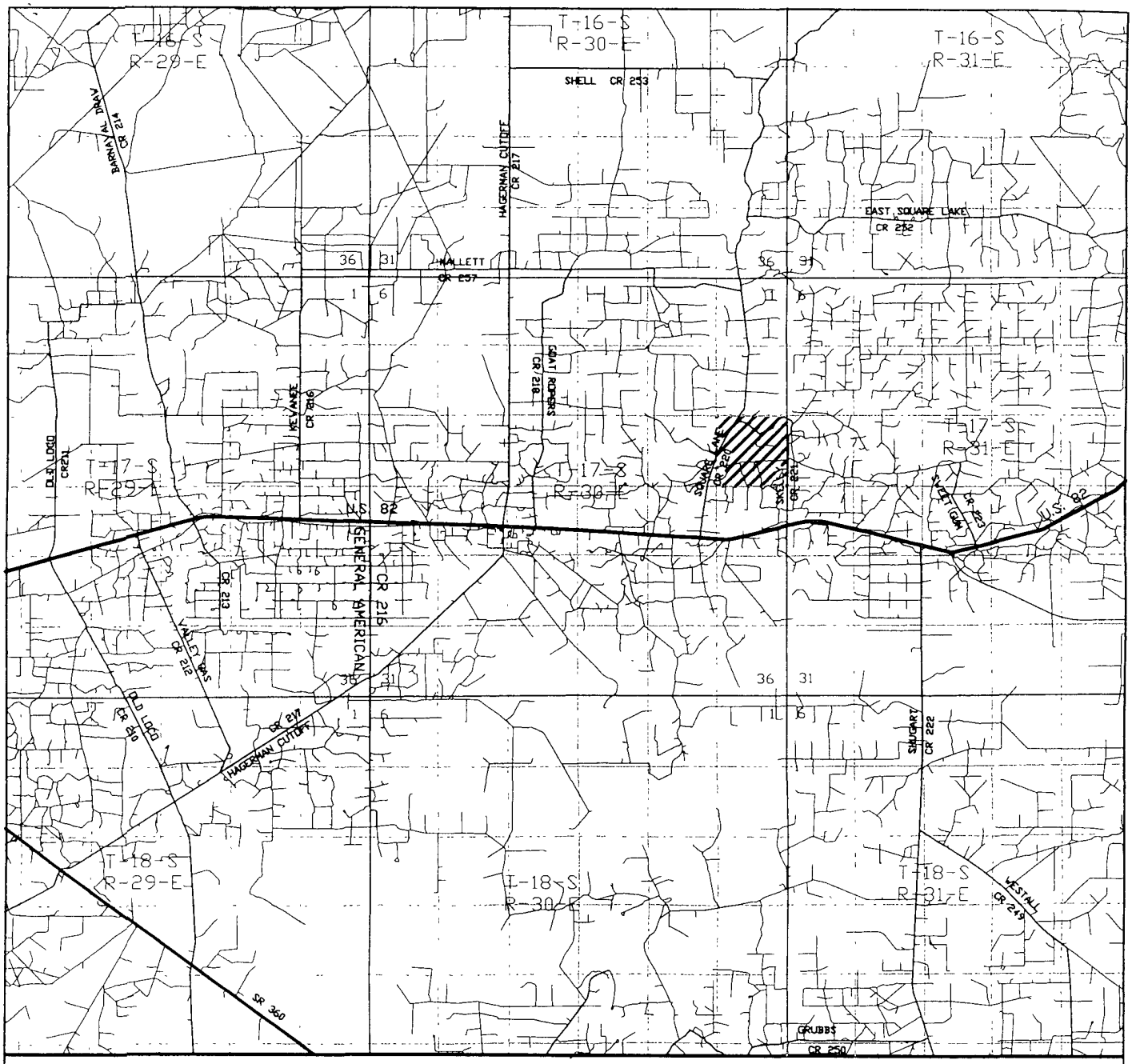
Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL SURVEYOR

W.O. 08-0104

Certificate No Gary L. Jones 7977

BASIN SURVEYS



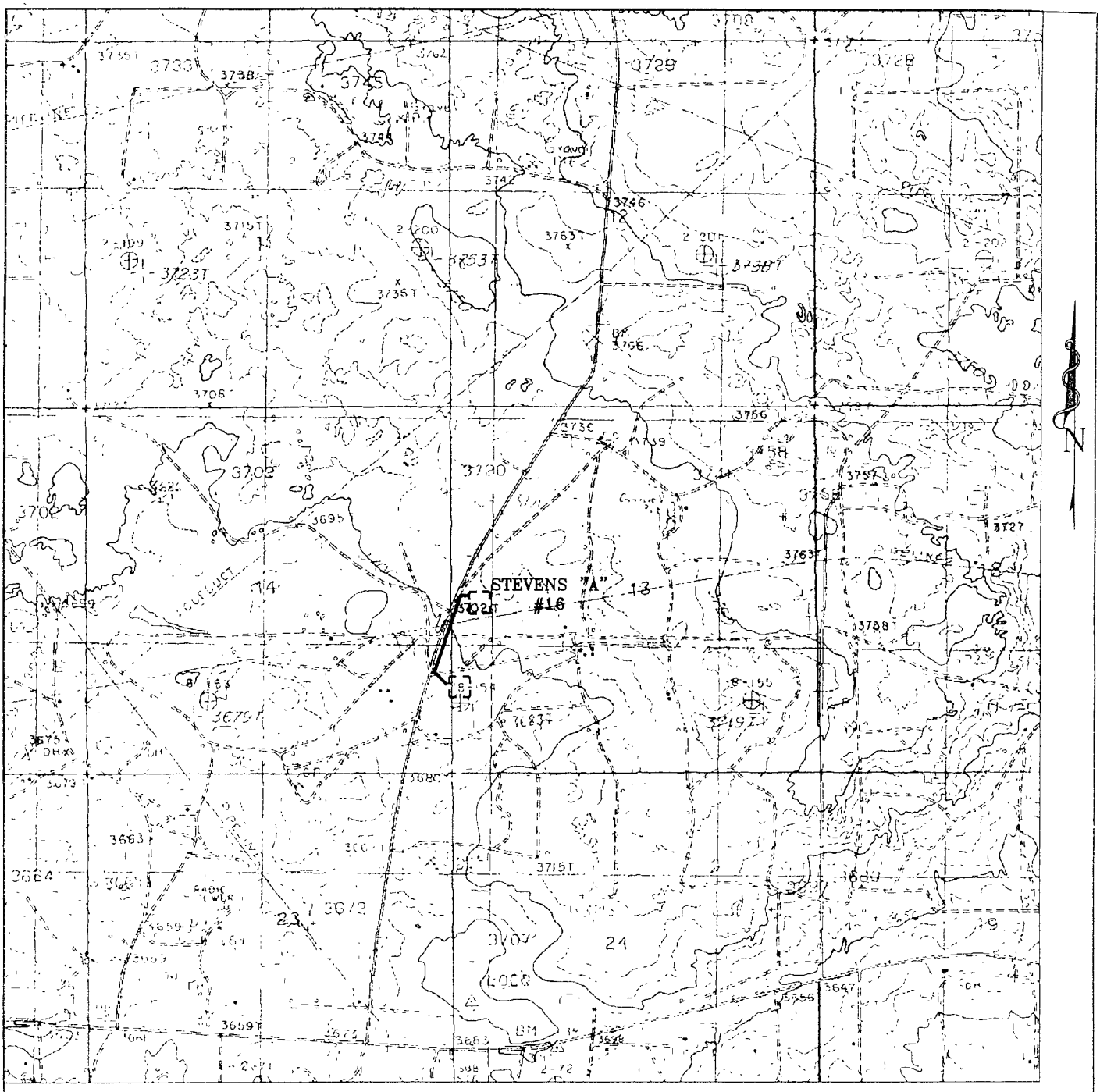
STEVENS "A" #16
Located 2430' FSL and 350' FWL
Section 13, Township 17 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N West County Rd
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W O Number	JMS 19054TR
Survey Date	01-25-2008
Scale	1" = 2 MILES
Date	01-28-2008

BURNETT OIL COMPANY



PROPOSED FLOWLINE TO THE STEVENS "A" #16
Sections 13&14, Township 17 South, Range 30 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
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys com

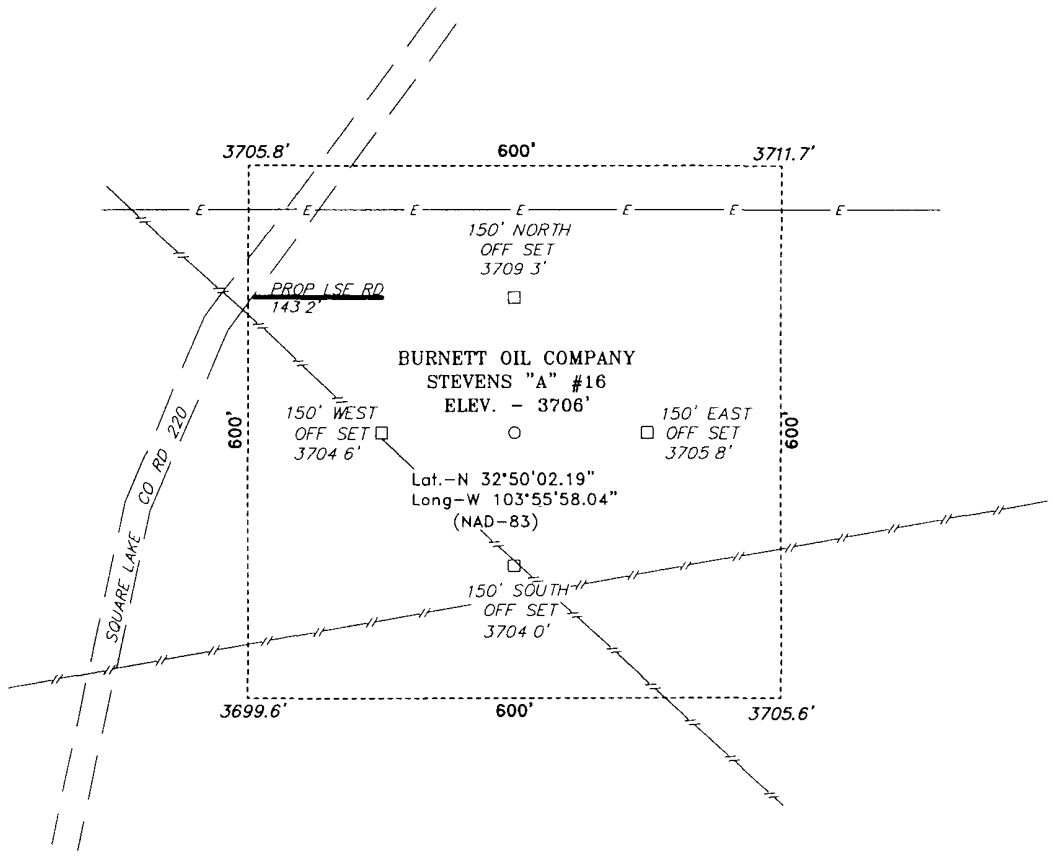
W O Number	JMS 19054TT
Survey Date	01-25-2008
Scale	1" = 2000'
Date	01-28-2008

BURNETT OIL COMPANY

STEVENS A #16
SURFACE EXHIBIT A1

SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO.



200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location

FROM THE JUNCTION OF US HWY 82 AND SQUARE LAKE, GO NORTH ON SQUARE LAKE TO PROPOSED LEASE ROAD

BURNETT OIL COMPANY

REF STEVENS "A" #16 / WELL PAD TOPO

THE STEVENS "A" #16 LOCATED 2430'

FROM THE SOUTH LINE AND 350' FROM THE WEST LINE OF

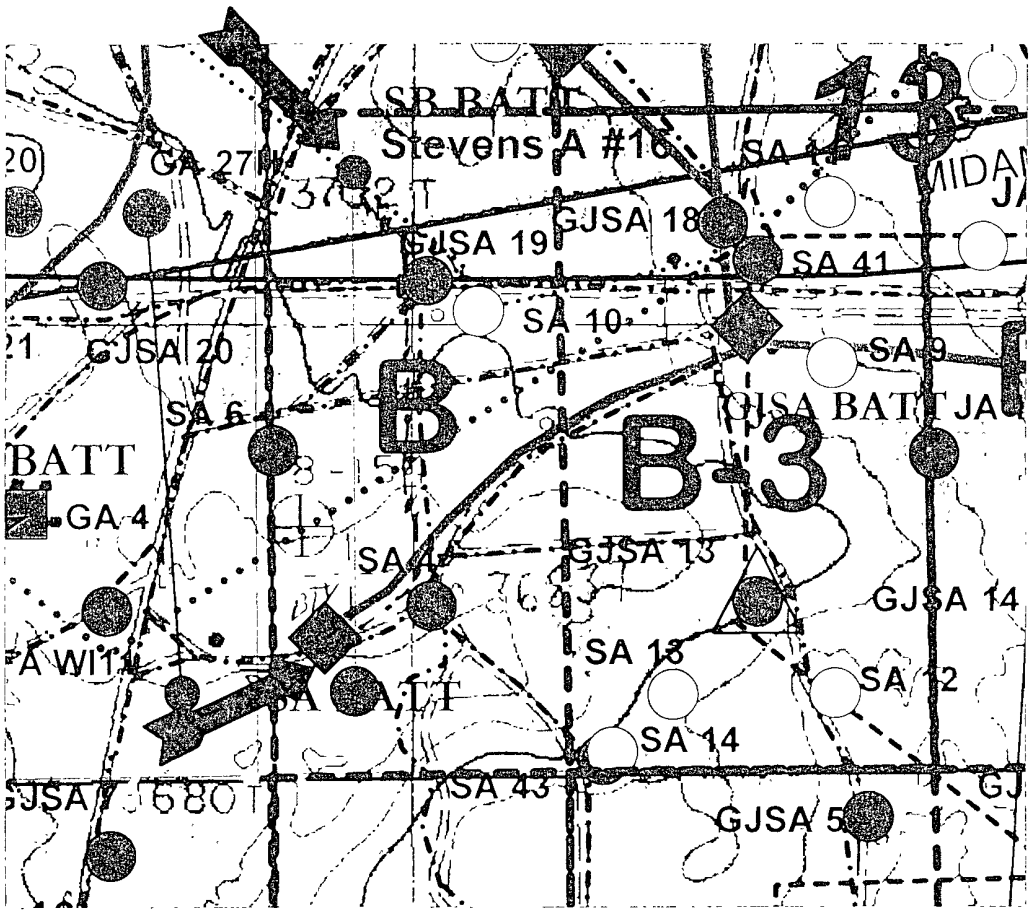
SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P O BOX 1786 - HOBBS, NEW MEXICO

W O Number 19054	Drawn By J. SMALL		
Date 01-28-2008	Disk JMS 19054W	Survey Date 01-25-2008	Sheet 1 of 1 Sheets

STEVENS A #16
SURFACE EXHIBIT A2



Well Names

GA = Gissler A
GB = Gissler B
SA = Stevens A
GJSA = Grayburg Jackson San Andres

Burnett Oil Co., Inc. 6666		
Stevens A #16 Proposed Well Location Map Reflects Burnett Operated Wells Only Eddy County, New Mexico		
Author S Spies, Geo Tech		Date January 29, 2008
	Scale 1" = 750'	

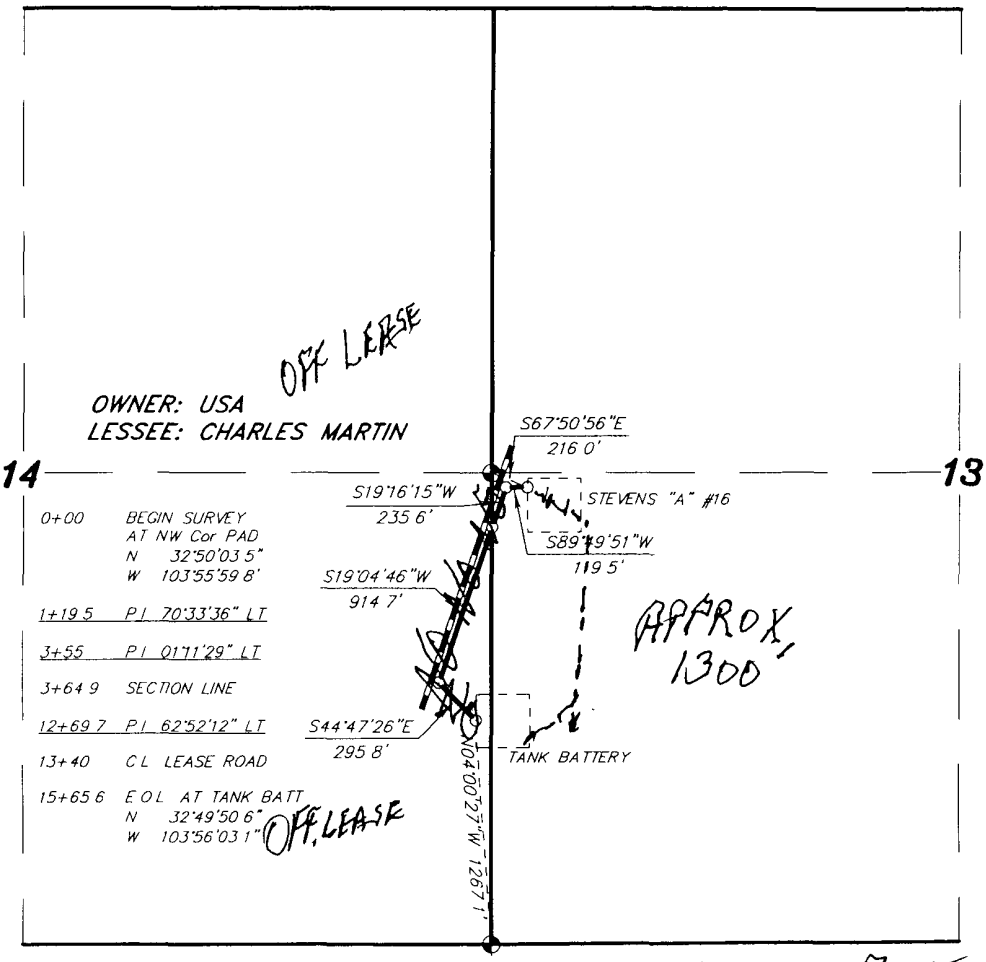
— · — FLOWLINE

Stevens A #16

Surface Hole Location: 350 FWL, 2430 FSL.
Unit L, Sect 13, 17S/30E, NMLC030570A
Lat/Long: 32.833934/-103.932269

Bottom Hole Location. 330 FSL, 330 FWL.
Unit M, Sect 13, 17S/30E

SECTIONS 13&14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



A NEW PLAT HAS BEEN REQUESTED ALL ON LEASE USING EXISTING INJECTION LINE ROW ON LEASE

LEGAL DESCRIPTION

A STRIP OF LAND 30 0 FEET WIDE, LOCATED IN SECTIONS 13&14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N M P M, EDDY COUNTY, NEW MEXICO AND BEING 15 0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY

NO

SECTION 13 = 364 9 FEET = 22 12 RODS = 0 07 MILES = 0 25 ACRES
SECTION 14 = 1200 7 FEET = 72 77 RODS = 0 23 MILES = 0 82 ACRES
TOTAL = 1565 6 FEET = 94 89 RODS = 0 30 MILES = 1 07 ACRES

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE

NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

GARY L. JONES N.M. P.L.S. No 7977 No. 5074

BASIN SURVEYS P O BOX 1786 – HOBBS, NEW MEXICO

1000 0 1000 2000 FEET

BURNETT OIL COMPANY

REF PROPOSED FLOWLINE TO THE STEVENS "A" #16

A LEASE ROAD CROSSING USA LAND IN SECTIONS 13&14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

W O Number 19054	Drawn By J. M. SMALL		
Date 01-28-2008	Disk JMS 19054P	Survey Date 01-25-2008	Sheet 1 of 1 Sheets

STEVENS A #16
SURFACE EXHIBIT C

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January 31, 2008

To: Bureau of Land Management

Re: Stevens A #16H Federal Lease NMLC030570A
Surf. Unit O, 2430' FSL, 350' FWL – BH Unit M, 330' FSL, 330' FWL
SEC.13, T17S, R30E- Eddy County, New Mexico

An approved Master Drilling Plan is on file for drilling in this area.

Yours truly,

James H. Arline

James H. Arline
Materials Coordinator

BURNETT PLAZA - SUITE 1500
801 CHERRY STREET - UNIT #9

BURNETT OIL CO., INC.

FORT WORTH, TX 76102-6881
(817) 332-5108

6666

MASTER DRILLING PLAN
BURNETT OIL CO., INC.
ALL VERTICAL/HORIZONTAL CEDAR LAKE YESO/ LOCO HILLS PADDOCK WELLS
FEDERAL LEASE # LC029338A, LC029339A, LC030570A, LC055264, LC055958, NM2746, NM2747
FEDERAL LEASE # NM2748 & NM074939
Section 8, 11, 12, 13, 14, 23, 24 & 25, Township 17 South, Range 30 East, Eddy County, N M

ACTUAL WELL LOCATION WILL BE ON THE SUBMITTED 3160-3 WITH THE SURFACE USE PLAN

1 **Geological Name of Surface Formation**
a Alluvium Surface

2. **Estimated tops of Geologic Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

a	Seven Rivers	1604'	Oil
b	Queen	2222'	Oil
c	Grayburg	2670'	Oil
d	San Andres	2985'	Oil
e	Glorieta	4460'	Oil
f	Total Depth	6000'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes We will set 10-3/4" casing @ approx +/- 400' in the Anhydrite, above the Salt and circulate cement to surface We will isolate the oil zones by running 7" casing to total depth and circulating cement to the surface

3 **Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)**

a. VERTICAL WELL

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)								
14-3/4"	0'-400'	10-3/4"	32 75#	ST&C	H40	1 125	1 00	1 80
8-3/4"	0'-6000'	7"	23 00#	LT&C	J55	* 1 125	1 00	1 80

* 500' of fresh water gradient (433 psi/ft) fluid will be maintained inside casing to keep SF 1 125

b. Horizontal

Hole Size	Interval MD	Interval TVD	OD Csg	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	0'-400'	0'-400'	10-3/4"	32 75#	ST&C	H40	1 125	1 00	1 80
8-3/4"	0'-4500'	0'- 4500'	7"	23 00#	LT&C	J55	1 40	1 00	1 80
8-3/4"	4500'-TD'	4500'--TD'	7"	23 00#	BT&C	J55	1 26	1 00	1 80

4. **Cementing Program (Note Yields and DV Tool Depth if Multiple Stage.)**

a 10-3/4" Surface Cement to surface Lead with 150 sx Class C cement +10% A-10, + 10#/sx LCM-1, 1% CaCl, 0 01 gps FP-6L, 14 6 ppg, 1 67 CF/Sk Yield Tail with 500 sks Class C cement + 2% CaCl + 0 01 gps FP-6L 14 8 ppg, 1 35 CF/Sx yield TOC Surface.

b 7" Production

1 VERTICAL

Stage 1 Cement: 550 sks (50:50) Poz (Fly Ash).Class C cement + 2% Bentonite + 0 01 gps FP-6L+ 0.3% FL-52A + 1.2% CD-32 + 5% Sodium Chloride Yield 1 27 CF/Sx **DV @ approx. 2600'.**

Stage 2 Cement: Lead with1800 sks (35:65) Poz (Fly Ash) Class C cement + 6% Bentonite + 5 lbs/sx LCM-1 + 0 125 lbs/sx Cello Flake + 01 gps FP-6L + 5% Sodium Chloride, Yield 1 89 CF/Sx Tail with 100 sx Class C + 1% CaCl + 0 01 gps FP-6L 14 8 ppg, Yield 1 62 CF/Sx, TOC Surface

2 . HORIZONTAL

Stage 1 Cement: 600 sks Super H + 0 5% LAD 1 + .4% CFR3 +1 lb/sx Salt + 25lb/sx DAIR 3000. 1 60 CF/Sx Yield **DV @ approx. 2600'.**

Stage 2 Cement: Lead : 1600 sx Prem Cl C +2% CaCl + .124 #/sx Poly Flake 1 89 CF/Sx Yield Tail 200 sx Cl C+1% CaCl. Yield 1.33 CF/sx , TOC Surface

The above cement volumes may be revised pending the caliper measurement from the open hole logs Casing design is to bring all cement to the surface

5. **Pressure Control Equipment:**

The blowout prevention equipment (BOPE) shown in Drilling Exhibit E will consist of a 2000 PSI Hydril Unit with hydraulic closing equipment The equipment will comply with Onshore Order #2 and will be tested as described in this order. The 10-3/4" drilling head will be installed on the surface casing and in use continuously until total depth is reached An independent testing company (**Mann Welding)** will be used for the testing All BOPE and associated equipment will be tested to 2000 PSI with the rig pump prior to drilling out the 10-3/4" casing shoe A 2" kill line and 3" choke line will be incorporated in the drilling spool below the BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating

6. **Proposed Mud Circulation System**

Depth	Mud Wt	Visc	Fluid Loss	Type System
0'-400'	8 6–9 5			Fresh Water
400'- 6700' MD	10 0 max			Brine Water (VERTICAL/HORIZONTAL)

The necessary mud products for weight addition and fluid loss control will be on location at all times

7. **Auxiliary Well Control and Monitoring Equipment:**

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

b A full opening drill pipe stabbing valve with the appropriate connections on the rig floor at all times

c Hydrogen Sulfide detection equipment will be in operation after drilling out 10-3/4" casing shoe until 7" casing is cemented The breathing equipment will be on location from drilling out the 10-3'4" casing shoe until total depth is reached

8. **Hydrogen Sulfide Plan and Training**

a All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on each well

b The hazards and characteristics of Hydrogen Sulfide (H2S)

c The proper use and maintenance of personal protective equipment and life support systems

d The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and the prevailing wind

e The proper techniques for first aid and rescue procedures

In addition, supervisory personnel will be trained in the following areas:

a The effects of H2S on metal components If high tensile tubulars are to be used, personnel will be trained in special maintenance requirements

b Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures

c The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan (if applicable)

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan (if applicable) This plan shall be available at the well site All personnel will be required to carry documentation that they have received the proper training

a. Protective equipment for essential personnel:

1 Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area (to be determined)

b. H2S detection and monitoring equipment:

1 Three (3) portable H2S monitors positioned on location for best coverage and response These units have warning lights and audible sirens when H2S levels of 20 PPM are reached

c. Visual warning systems:

1 Wind direction indicators will be positioned for maximum visibility
2 Caution/Danger signs shall be posted on roads providing direct access to location Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at reasonable distance from the immediate location Bilingual signs will be used when appropriate

d. Mud program:

1 The mud program has been designed to minimize the volume of H2S circulated to the surface Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones

e. Communication

1 Cellular Telephone and/or 2-way radio will be provided at well site
2 Landline telephone is located in field office

f. Metallurgy:

1 All drill strings, casings, tubing, wellheads, Hydril BOPS, drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service
2 All elastomers used for packing and seals shall be H2S trim

9. **Logging, Coring and Testing program:**

a Any drill stem tests will be based on geological sample shows

b The open hole electrical logging program will be

1 Total depth to 1000' Dual Laterolog-Micro Laterolog with SP and GR Compensated Neutron-Z Density log with Gamma Ray and Caliper

2 Total depth to Surface Compensated Neutron with Gamma Ray

3 No coring program is planned

4 Additional testing will be done subsequent to setting the 7" production casing The specific Intervals will be based on log evaluation, geological sample shows and drill stem tests

10. **Potential Hazards:**

No abnormal pressures or temperatures are expected. There is known H2S in this area The operator will comply with the provisions of Onshore Oil and Gas Order #6 No lost circulation is expected to occur All personnel will be familiar with the safe operation of the equipment being used to drill this well The maximum anticipated bottom hole pressure is 1000# The maximum anticipated bottom hole temperature is 92°F

11. **Anticipated Start Date and Duration of Operation**

Road and location construction will begin after BLM has approved the APD and has approved the start of the location work The anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location Move in and drilling is expected to take approx 25 days If production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) to place the well on production

12. **Operator's representative on the site:**

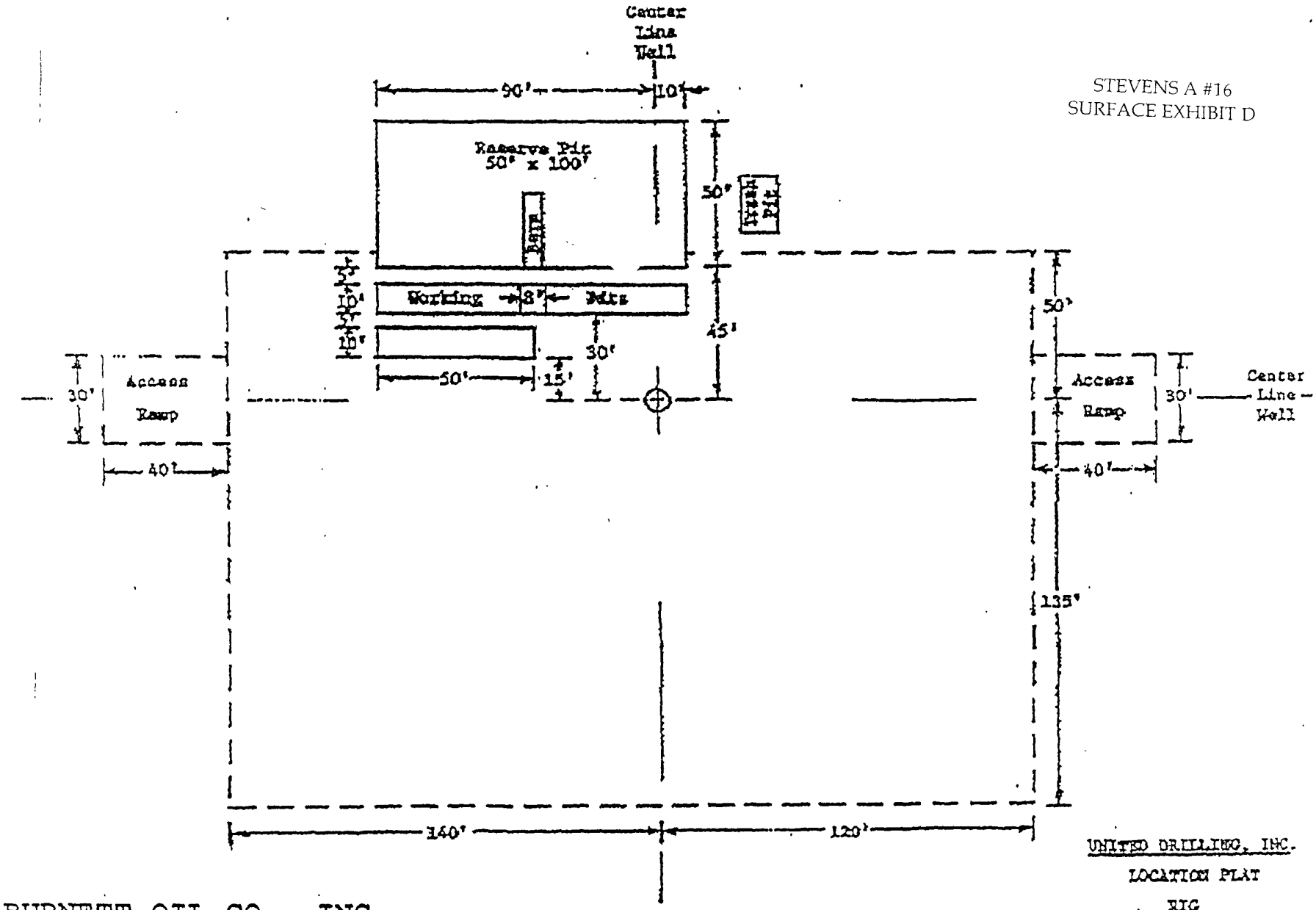
Burnett Oil Co , Inc field representative responsible for compliance with the approved drilling and operations plan is

Mr Belton Mathews, District Supt
P O Box 188
Loco Hills, New Mexico 88255
Office phone 505-677-2313
Home phone 505-746-8647
Cellular phone 505-703-9601

Date 1/18/2008
UPDATE

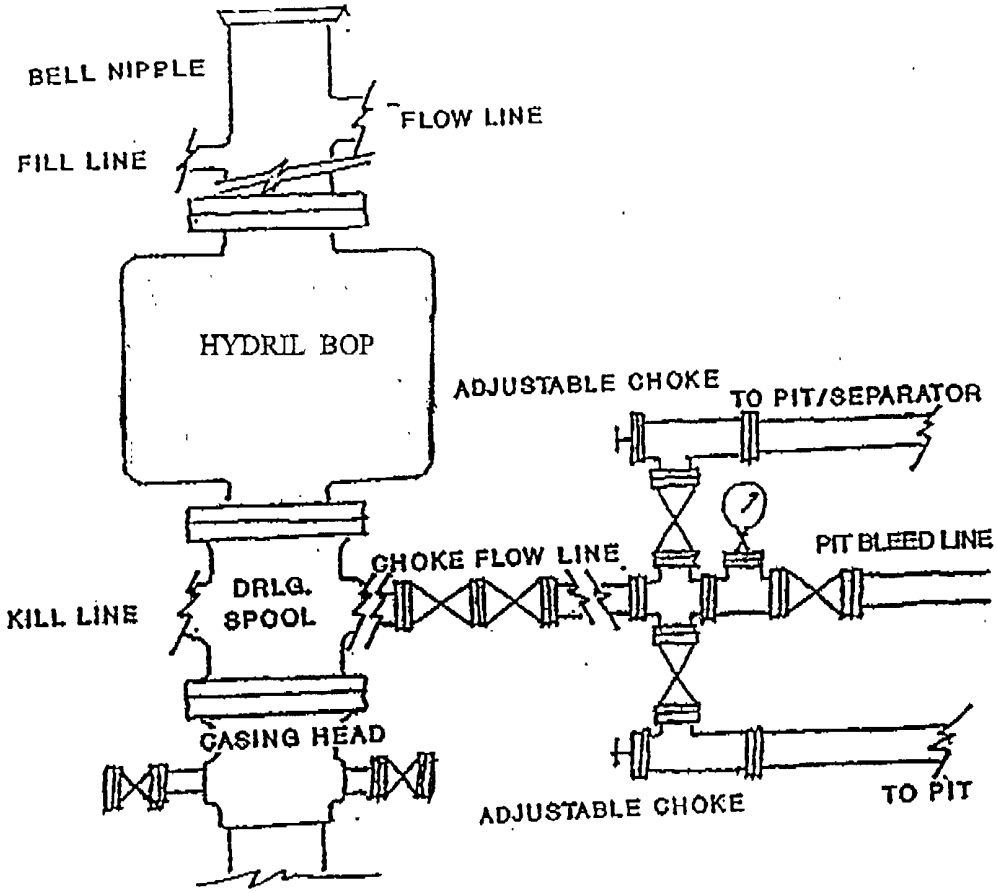
By Mark A Jacoby
Mark A Jacoby
Engineering Manager

STEVENS A #16
SURFACE EXHIBIT D



BURNETT OIL CO., INC.
PROPOSED DRILL SITE LAYOUT

UNITED DRILLING, INC.
LOCATION PLAT
RIG
Scale: 1"=40'



BURNETT OIL CO., INC.

BLOWOUT PREVENTER &
CHOKE MANIFOLD DIAGRAM
2000 PSI WORKING PRESSURE
SERIES 600 FLANGES

DRILLING EXHIBIT E

6666

SURFACE USE PLAN OF OPERATIONS
BURNETT OIL CO., INC.
Stevens A Well No.16, Federal Lease No. NMLC 030570A
Surface Location Unit L, 2430' FSL, 350' FWL
Bottom Hole Location Unit M, 330 FSL, 330' FWL
Section 13, Township 17 South, Range 30 East, Eddy County, N M.

1. **EXISTING ROADS:**
   a The well site and elevation plat for the proposed well are reflected on the well site layout, Form C-102. This well was staked by Basin Surveys.
   b All roads into the location are shown on Vicinity Map (Exhibit A.)
   c Directions to the location from the intersection of US Hwy #82 and County Road (CR) #220(East of Loco Hills, NM.) go North on CR #220 approx 1 2 miles to the proposed 143 2' road on the West side of pad to the well site.

2. **New or Reconstructed Access Roads:**
   a The well site layout, Form C-102 and Exhibit A1 and A2 show the existing well pad The new access road will extend from the West side of this location approx 143 2' to this Stevens A #16 well site No turn outs are planned
   b The maximum width of this road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche All construction requirements of the road stipulations will be followed
   c. All construction material will be native caliche. It may be available at the proposed location, If not caliche will be hauled from nearest BLM approved caliche pit.
   d. No cattle guards, grates or fence cuts will be required.

3. **Location of existing wells:**
   a. See the attached Exhibit B plat showing all wells within a ½ mile radius of the proposed well site

4. **Location of existing and/or proposed production facilities:**
   See Exhibit B for location of **existing** commingled approved Stevens A Tank Battery facility on this Federal lease.
   a The well site will require electricity for the prime mover We will contact Central Valley Electric Cooperative, Inc to provide the electric power poles and the electric line from their nearest connection The routing and pole placement will be provided in their ROW application All electric installation will be done in accordance with all existing state and federal regulations
   b We propose to lay approx. **1300' of new 3" PVC flowline** from the new Stevens A #16 Cedar Lake Yeso well to the existing Stevens A commingled Tank Battery header. This flowline will be laid above ground along existing injection line routing on this Federal lease. (See Exhibit B and C plat) All production in this battery is allocated based on periodic individual well test

5. **Location and Type of Water Supply:**
   All water to be used in drilling the well will be brine or fresh water transported by truck over existing And above proposed lease road from Loco Hills, New Mexico or fresh or produced water furnished from our existing waterflood facilities in the area. We may install a pump and lay a temporary 2" poly line on the lease from the battery to the rig for this drilling water

6. **Construction Materials:**
All construction material for the roadway and drilling pad will be native caliche from the nearest BLM approved pit or from existing available deposits found on the location All will be in accord with the drilling stipulations for this well

7. **Methods of Handling Waste Disposal:**
a. Drill cuttings will be disposed of in the lined reserve drilling pit Auxiliary lined emergency water containment pits may also be necessitated by large volume water flows All drilling fluids will be allowed to evaporate after completion of drilling After proper disposal of contents, pits will be back filled, leveled and re-seeded per BLM site stipulations
b Trash, waste paper, garbage and junk will be placed in a portable, screened trash container on location All trash and debris will be transported to an authorized off-lease disposal station within 30 days following the completion activities.
c. A properly maintained Porto-john will be provided for the crews during drilling and completion operations All will be removed after completion operations have ended
d. Oil produced during testing will be put into steel storage tank for later sales
e Water produced during testing operations will be put in the lined reserve pit until well is turned to the lease tank battery All pit contents will be disposed of through one of our approved disposal methods.

8. **Ancillary Facilities:** There are no planned ancillary facilities for this well

9. **Well Site Layout:**
a Exhibit D shows the relative location and dimensions of the drilling pad and related components Only minor differences, if any, in length and/or width of the drilling pad are anticipated, depending on which drilling contractor is selected to drill the well Only minor leveling of the drilling site is anticipated.
b All pits will be in accordance with the BLM stipulations for this well Pit liner will be 6 mils thick polyethylene and will extend over the dike and be anchored in place. Reserve pit will be fenced until empty

10. **Plans for surface Reclamation:**
a After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operations will be removed Pits liners will be buried or hauled away. Pits will be backfilled, leveled and re-seeded in accord with the BLM well stipulations.
b Any unguarded pits containing fluid will be fence until backfilled
c The pad size will be reduced to the amount required for normal operation of the producing well This reduced portion will be restored to the BLM stipulations in section a
d If a well is abandoned, the surface location and unneeded road will be restored according to BLM stipulations within 90 days of final abandon and site re-seeded with BLM (B) seed mix

11. **Surface ownership:**
All lands are owned by the U S Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary use of the region for the production of oil and gas and the grazing of livestock.

12. Other information:

a The area surrounding the well site is grassland. The area is relatively flat with small hills and sand dunes The topsoil is fine, deep sand underlain by caliche Vegetation cover is generally sparse and consists of mesquite, yucca, shinnery oak and sparse native grasses Wildlife in the area includes deer, coyotes, rabbits, rodents, reptiles, dove and quail

b No permanent or live water is found in the general proximity of this area

c No dwellings are found within two (2) miles of this location

d There is intermittent cattle grazing and hunting in the area; however, the principal land use is for oil and gas production

e. An archaeological clearance report from Boone Archaeological Services will be sent to the BLM office in Carlsbad, N M.

13. Bond Coverage:

Current Bond is BLM Bond # NMB000197 The Surety Bond is #B000863. Both are effective May 21, 2004 and remain in place.

14. Operator's Representative:

Burnett Oil Co., Inc field representative responsible for compliance with the approved surface use and operations plan is:

Mr Belton Mathews, District Supt.
P O. Box 188
Loco Hills, New Mexico 88255
Office phone: 505-677-2313
Home phone 505-746-8647
Cellular phone. 505-703-9601

I hereby certify that I, or persons under my direct supervision have inspected the drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are to the best of my knowledge, true and correct, and that the work associated with operations proposed herein will be performed by Burnett Oil Co., Inc and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U S C. 1001 for the filing of a false statement

Date 1/31/2008

By Mark A Jacoby
Mark A Jacoby
Engineering Manager

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Burnett Oil
LEASE NO.:	NMLC030570A
WELL NAME & NO.:	Stevens A No 16H
SURFACE HOLE FOOTAGE:	2430' FSL & 350' FWL
BOTTOM HOLE FOOTAGE	330' FSL & 330' FWL
LOCATION:	Section 13, T. 17 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

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

B. TOPSOIL

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

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 100' X 50' on the North Northwest side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

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

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

F. ON LEASE ACCESS ROADS

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

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

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

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

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

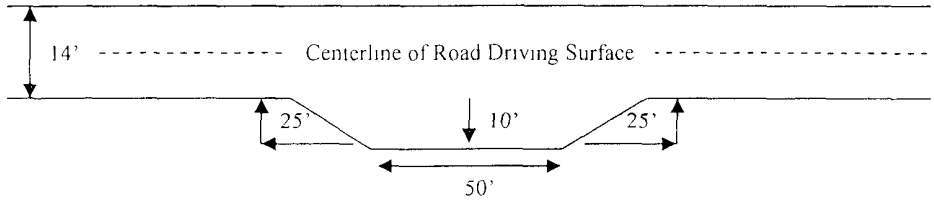
Ditching

Ditching shall be required on both sides of the road.

Turnouts

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

Standard Turnout – Plan View

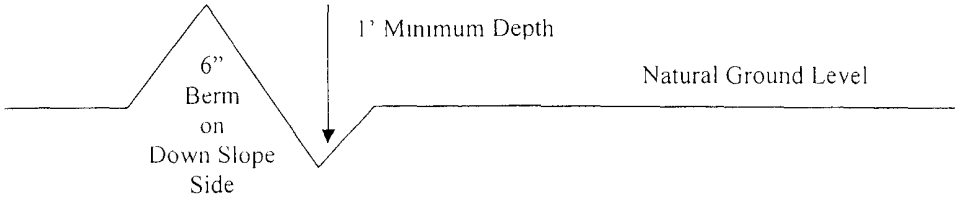


Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Culvert Installations

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

Cattleguards

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

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

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

Fence Requirement

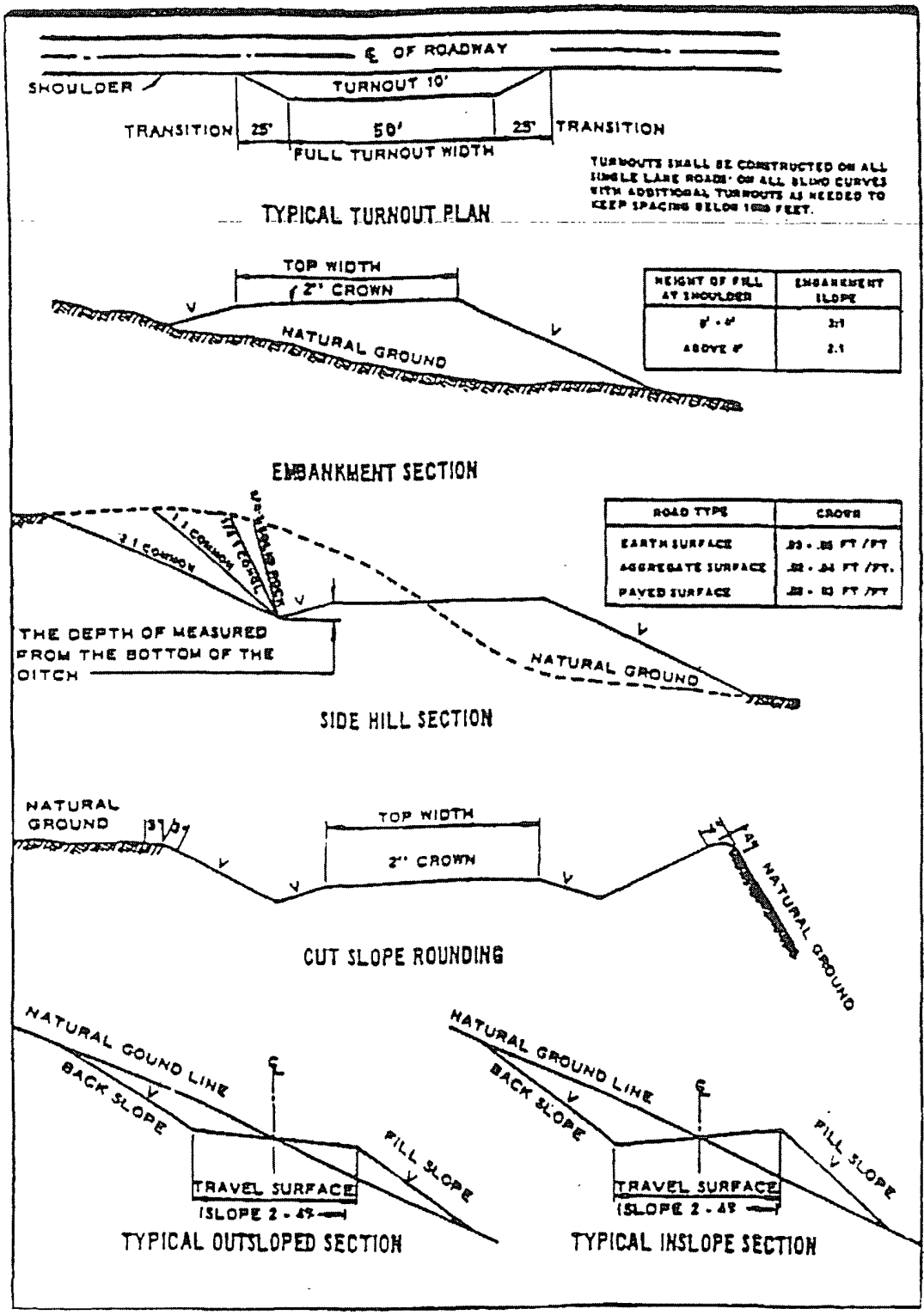
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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

Public Access

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

Note – well can be considered orthodox from the LP at 4850' MD to TD.

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **Measurements between 500-2000 ppm in the gas stream.**

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

B. CASING

1 The **10-3/4** inch surface casing shall be set **at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface

a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement). **Please provide WOC times to inspector for cement slurries.**

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

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

Possible lost circulation in the Grayburg and San Andres formations.
Possible water flows in the Salado and Artesia Groups.

2. The minimum required fill of cement behind the **7** inch production casing is:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **First stage to circulate.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

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

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

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

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

D. DRILL STEM TEST

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

VI. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2 The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S C. 6901, et seq) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to·

(1) Land clearing.
(2) Earth-disturbing and earth-moving work.
(3) Blasting
(4) Vandalism and sabotage

c Acts of God

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder Such action by the Authorized Officer shall not relieve the holder

of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **25** feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8 The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

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

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

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

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

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

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

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

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

(Insert Seed Mixture Here)

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*Pounds of pure live seed:

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

(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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

"Mark Jacoby"
<mjacoby@burnettoil.com>
02/20/2008 03 04 PM

To <Wesley_Ingram@nm.blm gov>
cc <jha@burnettoil com>
bcc
Subject Stevens A 16H Directional Plan

Wesley,
Per our conversation I am attaching the plan view for the subject well plus the detailed coordinates file from which this plan was prepared Per fax we will send the TVD and MD for the drilling permit
Thank you for your help and direction in getting this APD expedited We hope to do another directional fairly soon so maybe we will have it down so I won't keep pestering you
Thanks,

Mark A Jacoby
Engineering Manager
Burnett Oil Co , Inc
Burnett Plaza - Suite 1500
801 Cherry Street - Unit #9
Ft Worth, Texas 76102-6881
Office 817-332-5108
Cell 817-312-2751
Fax 817-332-2438


HallibPlan #1 txt Halliburton Stevens 'A' #16 Plan #1 pdf

Burnett Oil Company

HALLIBURTON
Sperry Drilling Services

Project: Eddy County, NM (NAD 83)
Site: Stevens "A"
Well: #16 H
Wellbore: Wellbore #1
Plan: Plan #1 (#16/Wellbore #1)
Rig: TBD

Burnett Oil Co., Inc.

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
4383 94	0 00	0 00	4383 94	0 00	0 00	0 00	0 00	0 00	KOP at 4 383 MD
4850 43	86 30	180 72	4693 00	-289 70	-3 65	18 50	180 72	289 73	LP at 4 850 MD
6664 09	86 30	180 72	4810 00	-2099 44	-26 47	0 00	0 00	2099 61	TD at 6 664 09 MD

WELLBORE TARGET DETAILS (MAP CO ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
S "A"#16 PBHL(P1)	4810 00	-2099 44	-26 47	665243 69	664335 47	Point

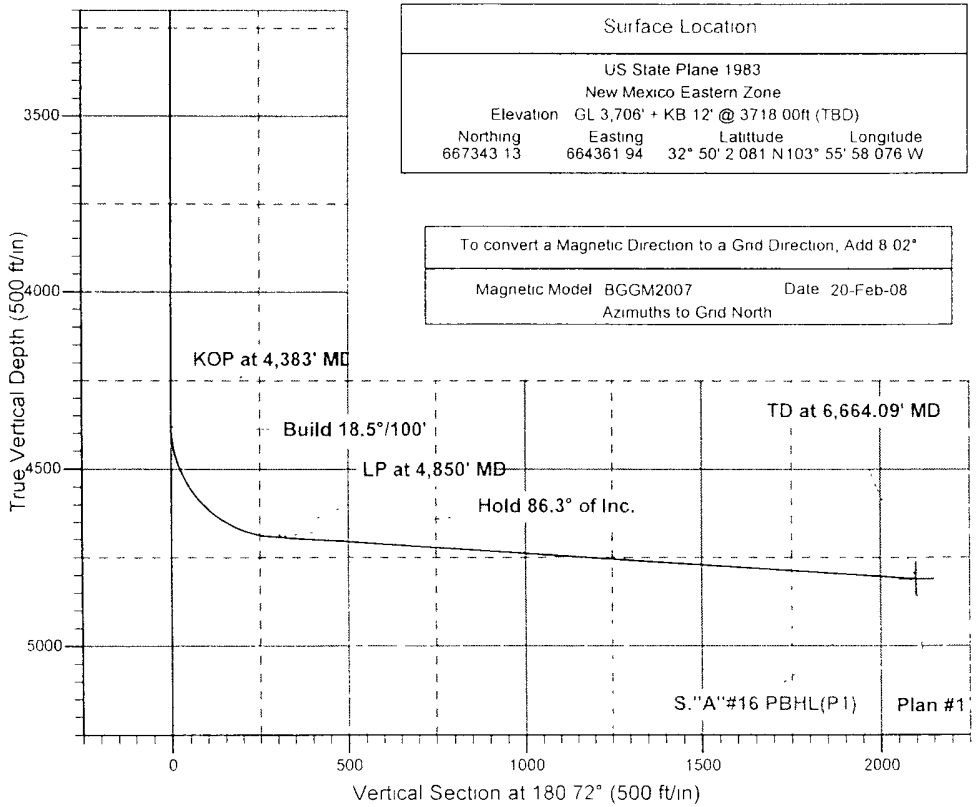
Surface Location

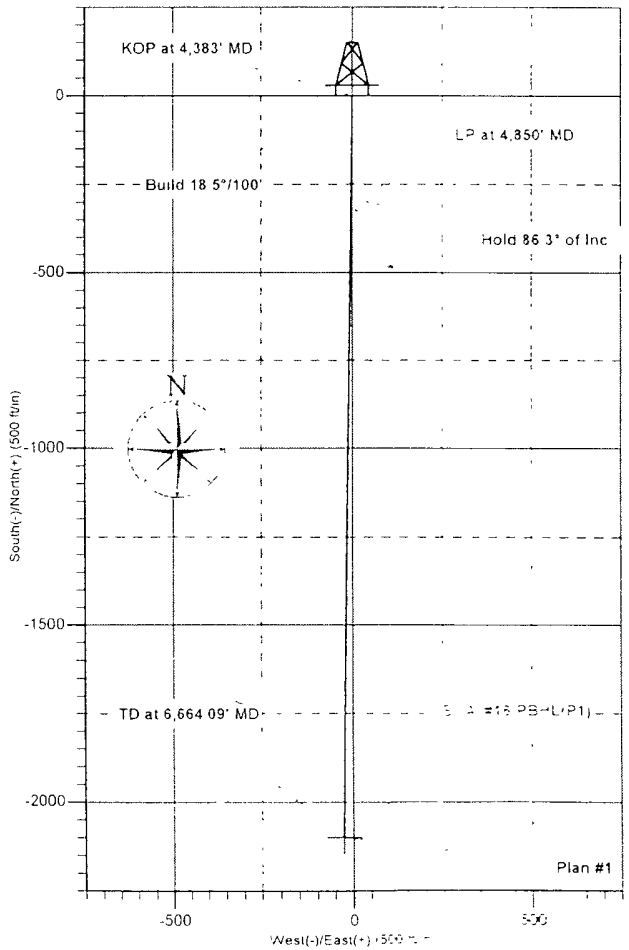
US State Plane 1983
New Mexico Eastern Zone
Elevation GL 3,706' + KB 12' @ 3718 00ft (TBD)

Northing	Easting	Latitude	Longitude
667343 13	664361 94	32° 50' 2 081 N	103° 55' 58 076 W

To convert a Magnetic Direction to a Grid Direction, Add 8 02°

Magnetic Model BGGM2007 Date 20-Feb-08
Azimuths to Grid North





Burnett Oil Company

Eddy County, NM (NAD 83)
Stevens "A"
#16 H

Wellbore #1

Plan: Plan #1

Sperry Drilling Services
Proposal Report

20 February, 2008

Well Coordinates 667,343 13 N, 664,361 95 E (32° 50' 02 08" N, 103° 55' 58 08" W)
Ground Level 3,706 00 ft

Local Coordinate Origin	Centered on Well #16
Viewing Datum	GL 3,706' + KB 12' @ 3718 00ft (TBD)
TVDs to System	N
North Reference	Grid
Unit System	API - U S Survey Feet

Version 2003 16 Build 42B

HALLIBURTON

Plan Report for #16H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
100 00	0 00	0 00	100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
200 00	0 00	0 00	200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
300 00	0 00	0 00	300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
400 00	0 00	0 00	400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
500 00	0 00	0 00	500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
600 00	0 00	0 00	600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
700 00	0 00	0 00	700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
800 00	0 00	0 00	800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
900 00	0 00	0 00	900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,000 00	0 00	0 00	1,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,100 00	0 00	0 00	1,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,200 00	0 00	0 00	1,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,300 00	0 00	0 00	1,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,400 00	0 00	0 00	1,400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,500 00	0 00	0 00	1,500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,600 00	0 00	0 00	1,600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,700 00	0 00	0 00	1,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,800 00	0 00	0 00	1,800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,900 00	0 00	0 00	1,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,000 00	0 00	0 00	2,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,100 00	0 00	0 00	2,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,200 00	0 00	0 00	2,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,300 00	0 00	0 00	2,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2 400 00	0 00	0 00	2,400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,500 00	0 00	0 00	2,500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,600 00	0 00	0 00	2,600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,700 00	0 00	0 00	2,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2 800 00	0 00	0 00	2,800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,900 00	0 00	0 00	2,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,000 00	0 00	0 00	3 000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,100 00	0 00	0 00	3,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,200 00	0 00	0 00	3,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3 300 00	0 00	0 00	3,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3 400 00	0 00	0 00	3,400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,500 00	0 00	0 00	3,500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3 600 00	0 00	0 00	3,600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,700 00	0 00	0 00	3,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,800 00	0 00	0 00	3,800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,900 00	0 00	0 00	3,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4 000 00	0 00	0 00	4,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,100 00	0 00	0 00	4,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,200 00	0 00	0 00	4,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,300 00	0 00	0 00	4,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,383 94	0 00	0 00	4,383 94	0 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP at 4,383' MD - Build 18.5°/100'										
4,400 00	2 97	180 72	4,399 99	-0 42	-0 01	0 42	18 50	18 50	0 00	180 72
4 500 00	21 47	180 72	4,497 30	-21 49	-0 27	21 49	18 50	18 50	0 00	0 00
4,600 00	39 97	180 72	4,582 90	-72 35	-0 91	72 36	18 50	18 50	0 00	0 00
4,700 00	58 47	180 72	4,647 93	-147 74	-1 86	147 76	18 50	18 50	0 00	0 00
4,800 00	76 97	180 72	4,685 67	-239 87	-3 02	239 89	18 50	18 50	0 00	0 00
4,850 43	86 30	180 72	4,693 00	-289 70	-3 65	289 73	18 50	18 50	0 00	0 00
LP at 4,850' MD - Hold 86.3° of Inc										
4,900 00	86 30	180 72	4,696 20	-339 17	-4 28	339 19	0 00	0 00	0 00	0 00
5 000 00	86 30	180 72	4 702 65	-438 95	-5 53	438 99	0 00	0 00	0 00	0 00
5 100 00	86 30	180 72	4 709 10	-538 74	-6 79	538 78	0 00	0 00	0 00	0 00
5 200 00	86 30	180 72	4 715 55	-638 52	-8 05	638 57	0 00	0 00	0 00	0 00
5 300 00	86 30	180 72	4 722 00	-738 30	-9 31	738 36	0 00	0 00	0 00	0 00

Plan Report for #16H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
5,400 00	86 30	180 72	4,728 45	-838 09	-10 57	838 15	0 00	0 00	0 00	0 00
5,500 00	86 30	180 72	4,734 90	-937 87	-11 83	937 94	0 00	0 00	0 00	0 00
5,600 00	86 30	180 72	4,741 35	-1,037 65	-13 08	1,037 74	0 00	0 00	0 00	0 00
5,700 00	86 30	180 72	4,747 81	-1,137 44	-14 34	1,137 53	0 00	0 00	0 00	0 00
5,800 00	86 30	180 72	4,754 26	-1,237 22	-15 60	1,237 32	0 00	0 00	0 00	0 00
5,900 00	86 30	180 72	4,760 71	-1,337 01	-16 86	1,337 11	0 00	0 00	0 00	0 00
6,000 00	86 30	180 72	4,767 16	-1,436 79	-18 12	1,436 90	0 00	0 00	0 00	0 00
6,100 00	86 30	180 72	4,773 61	-1,536 57	-19 37	1,536 69	0 00	0 00	0 00	0 00
6,200 00	86 30	180 72	4,780 06	-1,636 36	-20 63	1,636 49	0 00	0 00	0 00	0 00
6,300 00	86 30	180 72	4,786 51	-1,736 14	-21 89	1,736 28	0 00	0 00	0 00	0 00
6,400 00	86 30	180 72	4,792 96	-1,835 92	-23 15	1,836 07	0 00	0 00	0 00	0 00
6,500 00	86 30	180 72	4,799 41	-1,935 71	-24 41	1,935 86	0 00	0 00	0 00	0 00
6,600 00	86 30	180 72	4,805 87	-2,035 49	-25 67	2,035 65	0 00	0 00	0 00	0 00
6,664 09	86 30	180 72	4,810 00	-2,099 44	-26 47	2,099 61	0 00	0 00	0 00	0 00

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
4,383 94	4,383 94	0 00	0 00	KOP at 4,383' MD
4,383 94	4,383 94	0 00	0 00	Build 18 5°/100'
4,850 43	4,693 00	-289 70	-3 65	LP at 4,850' MD
4 850 43	4,693 00	-289 70	-3 65	Hold 86 3° of Inc
6,664 09	4,810 00	-2,099 44	-26 47	TD at 6,664 09' MD

Vertical Section Information

	Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/_S (ft)	Origin +E/-W (ft)	Start TVD (ft)
Target		S "A"#16 PBHL(P1)	180 72	Slot	0 00	0 00	4,810 00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0 00	6,664 05	Plan #1	MWD

Casing Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
400 00	400 00	10-3/4" Casing	10-3/4	12-1/4

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
S "A"#16 PBHL(P1)	4,810 00	-2,099 44	-26 47	Point

North Reference Sheet for Stevens "A" - #16 - Wellbore #1

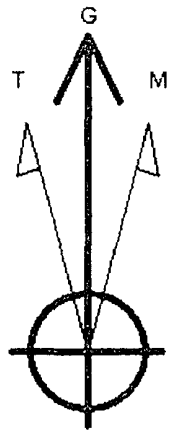
All data is in US Feet unless otherwise stated Directions and Coordinates are relative to Grid North Reference
Vertical Depths are relative to GL 3,706' + KB 12' @ 3718 00ft (TBD) Northing and Easting are relative to #16
Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)
Central Meridian is -104 33°, Longitude Origin 0° 0' 0 000 E°, Latitude Origin 0° 0' 0 000 N°
False Easting 541 337 50ft, False Northing 0 00ft, Scale Reduction 0 99992642

Grid Coordinates of Well 667,343 13 ft N, 664,361 94 ft E
Geographical Coordinates of Well 32° 50' 02 08" N, 103° 55' 58 08" W
Grid Convergence at Surface is 0 22°

Based upon Minimum Curvature type calculations, at a Measured Depth of 6,664 09ft
the Bottom Hole Displacement is 2,099 61ft in the Direction of 180 72° (Grid)

Magnetic Convergence at surface is -8 02° (20 February 2008, , BGGM2007)



Magnetic Model	BGGM 2007
Date	20-Feb-08
Declination	8 24°
Inclination/Dip	60 78°
Field Strength	49302

Grid North is 0 22° East of True North (Grid Convergence)
agnetic North is 8 24° East of True North (Magnetic Declination)
agnetic North is 8 02° East of Grid North (Magnetic Convergence)

To convert a True Direction to a Grid Direction, Subtract 0 22°
convert a Magnetic Direction to a True Direction, Add 8 24° East
To convert a Magnetic Direction to a Grid Direction, Add 8 02°

Burnett Oil Company
#16 - Plan #1

Eddy County, NM (NAD 83)
Stevens "A"
Your Ref:

Measured Depth (ft)	Incl. (ft)	Azim. (ft)	Sub-Sea Vertical Depth (ft)	Vertical Dogleg Depth Section (ft)	Rate (°/100ft)	Local Coordinates Northings (ft)	Eastings (ft)
UTM Coordinates							
0.00	0.000	0.000	-3718.00	0.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
30.00	0.000	0.000	-3688.00	30.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
60.00	0.000	0.000	-3658.00	60.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
90.00	0.000	0.000	-3628.00	90.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
120.00	0.000	0.000	-3598.00	120.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
150.00	0.000	0.000	-3568.00	150.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
180.00	0.000	0.000	-3538.00	180.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
210.00	0.000	0.000	-3508.00	210.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
240.00	0.000	0.000	-3478.00	240.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
270.00	0.000	0.000	-3448.00	270.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
300.00	0.000	0.000	-3418.00	300.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
330.00	0.000	0.000	-3388.00	330.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
360.00	0.000	0.000	-3358.00	360.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
390.00	0.000	0.000	-3328.00	390.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
420.00	0.000	0.000	-3298.00	420.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
450.00	0.000	0.000	-3268.00	450.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
480.00	0.000	0.000	-3238.00	480.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
510.00	0.000	0.000	-3208.00	510.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
540.00	0.000	0.000	-3178.00	540.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
570.00	0.000	0.000	-3148.00	570.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
600.00	0.000	0.000	-3118.00	600.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
630.00	0.000	0.000	-3088.00	630.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
660.00	0.000	0.000	-3058.00	660.00		0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00			
690.00	0.000	0.000	-3028.00	690.00		0.00 N	0.00 E

667343.126	N	664361.945	E	0.00	0.00				
720.00	0.000	0.000	-2998.00	720.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
750.00	0.000	0.000	-2968.00	750.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
780.00	0.000	0.000	-2938.00	780.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
810.00	0.000	0.000	-2908.00	810.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
840.00	0.000	0.000	-2878.00	840.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
870.00	0.000	0.000	-2848.00	870.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
900.00	0.000	0.000	-2818.00	900.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
930.00	0.000	0.000	-2788.00	930.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
960.00	0.000	0.000	-2758.00	960.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
990.00	0.000	0.000	-2728.00	990.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1020.00	0.000	0.000	-2698.00	1020.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1050.00	0.000	0.000	-2668.00	1050.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1080.00	0.000	0.000	-2638.00	1080.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1110.00	0.000	0.000	-2608.00	1110.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1140.00	0.000	0.000	-2578.00	1140.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1170.00	0.000	0.000	-2548.00	1170.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1200.00	0.000	0.000	-2518.00	1200.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1230.00	0.000	0.000	-2488.00	1230.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1260.00	0.000	0.000	-2458.00	1260.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1290.00	0.000	0.000	-2428.00	1290.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1320.00	0.000	0.000	-2398.00	1320.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1350.00	0.000	0.000	-2368.00	1350.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1380.00	0.000	0.000	-2338.00	1380.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1410.00	0.000	0.000	-2308.00	1410.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1440.00	0.000	0.000	-2278.00	1440.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1470.00	0.000	0.000	-2248.00	1470.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1500.00	0.000	0.000	-2218.00	1500.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1530.00	0.000	0.000	-2188.00	1530.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1560.00	0.000	0.000	-2158.00	1560.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1590.00	0.000	0.000	-2128.00	1590.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
1620.00	0.000	0.000	-2098.00	1620.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				

1650.00	0.000	0.000	-2068.00	1650.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1680.00	0.000	0.000	-2038.00	1680.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1710.00	0.000	0.000	-2008.00	1710.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1740.00	0.000	0.000	-1978.00	1740.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1770.00	0.000	0.000	-1948.00	1770.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1800.00	0.000	0.000	-1918.00	1800.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1830.00	0.000	0.000	-1888.00	1830.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1860.00	0.000	0.000	-1858.00	1860.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1890.00	0.000	0.000	-1828.00	1890.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1920.00	0.000	0.000	-1798.00	1920.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1950.00	0.000	0.000	-1768.00	1950.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
1980.00	0.000	0.000	-1738.00	1980.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2010.00	0.000	0.000	-1708.00	2010.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2040.00	0.000	0.000	-1678.00	2040.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2070.00	0.000	0.000	-1648.00	2070.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2100.00	0.000	0.000	-1618.00	2100.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2130.00	0.000	0.000	-1588.00	2130.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2160.00	0.000	0.000	-1558.00	2160.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2190.00	0.000	0.000	-1528.00	2190.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2220.00	0.000	0.000	-1498.00	2220.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2250.00	0.000	0.000	-1468.00	2250.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2280.00	0.000	0.000	-1438.00	2280.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2310.00	0.000	0.000	-1408.00	2310.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2340.00	0.000	0.000	-1378.00	2340.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2370.00	0.000	0.000	-1348.00	2370.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2400.00	0.000	0.000	-1318.00	2400.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2430.00	0.000	0.000	-1288.00	2430.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2460.00	0.000	0.000	-1258.00	2460.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2490.00	0.000	0.000	-1228.00	2490.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2520.00	0.000	0.000	-1198.00	2520.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2550.00	0.000	0.000	-1168.00	2550.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
2580.00	0.000	0.000	-1138.00	2580.00	0.00 N	0.00 E

667343.126	N	664361.945	E	0.00	0.00				
2610.00	0.000	0.000	-1108.00	2610.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2640.00	0.000	0.000	-1078.00	2640.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2670.00	0.000	0.000	-1048.00	2670.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2700.00	0.000	0.000	-1018.00	2700.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2730.00	0.000	0.000	-988.00	2730.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2760.00	0.000	0.000	-958.00	2760.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2790.00	0.000	0.000	-928.00	2790.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2820.00	0.000	0.000	-898.00	2820.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2850.00	0.000	0.000	-868.00	2850.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2880.00	0.000	0.000	-838.00	2880.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2910.00	0.000	0.000	-808.00	2910.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2940.00	0.000	0.000	-778.00	2940.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
2970.00	0.000	0.000	-748.00	2970.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3000.00	0.000	0.000	-718.00	3000.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3030.00	0.000	0.000	-688.00	3030.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3060.00	0.000	0.000	-658.00	3060.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3090.00	0.000	0.000	-628.00	3090.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3120.00	0.000	0.000	-598.00	3120.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3150.00	0.000	0.000	-568.00	3150.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3180.00	0.000	0.000	-538.00	3180.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3210.00	0.000	0.000	-508.00	3210.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3240.00	0.000	0.000	-478.00	3240.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3270.00	0.000	0.000	-448.00	3270.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3300.00	0.000	0.000	-418.00	3300.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3330.00	0.000	0.000	-388.00	3330.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3360.00	0.000	0.000	-358.00	3360.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3390.00	0.000	0.000	-328.00	3390.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3420.00	0.000	0.000	-298.00	3420.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3450.00	0.000	0.000	-268.00	3450.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3480.00	0.000	0.000	-238.00	3480.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				
3510.00	0.000	0.000	-208.00	3510.00	0.00	N	0.00	E	
667343.126	N	664361.945	E	0.00	0.00				

3540.00	0.000	0.000	-178.00	3540.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3570.00	0.000	0.000	-148.00	3570.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3600.00	0.000	0.000	-118.00	3600.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3630.00	0.000	0.000	-88.00	3630.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3660.00	0.000	0.000	-58.00	3660.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3690.00	0.000	0.000	-28.00	3690.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3720.00	0.000	0.000	2.00	3720.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3750.00	0.000	0.000	32.00	3750.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3780.00	0.000	0.000	62.00	3780.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3810.00	0.000	0.000	92.00	3810.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3840.00	0.000	0.000	122.00	3840.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3870.00	0.000	0.000	152.00	3870.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3900.00	0.000	0.000	182.00	3900.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3930.00	0.000	0.000	212.00	3930.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3960.00	0.000	0.000	242.00	3960.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
3990.00	0.000	0.000	272.00	3990.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4020.00	0.000	0.000	302.00	4020.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4050.00	0.000	0.000	332.00	4050.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4080.00	0.000	0.000	362.00	4080.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4110.00	0.000	0.000	392.00	4110.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4140.00	0.000	0.000	422.00	4140.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4170.00	0.000	0.000	452.00	4170.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4200.00	0.000	0.000	482.00	4200.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4230.00	0.000	0.000	512.00	4230.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4260.00	0.000	0.000	542.00	4260.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4290.00	0.000	0.000	572.00	4290.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4320.00	0.000	0.000	602.00	4320.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4350.00	0.000	0.000	632.00	4350.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4380.00	0.000	0.000	662.00	4380.00	0.00 N	0.00 E
667343.126 N	664361.945 E		0.00	0.00		
4410.00	4.822	180.722	691.97	4409.97	1.10 S	0.01 W
667342.030 N	664361.931 E		1.10	16.07		
4440.00	10.372	180.722	721.69	4439.69	5.06 S	0.06 W
667338.066 N	664361.881 E		5.06	18.50		
4470.00	15.922	180.722	750.90	4468.90	11.88 S	0.15 W

667331.246	N	664361.795	E	11.88	18.50			
4500.00	21.472	180.722		779.30	4497.30	21.49	S	0.27 W
667321.634	N	664361.674	E	21.49	18.50			
4530.00	27.022	180.722		806.65	4524.65	33.81	S	0.43 W
667309.319	N	664361.519	E	33.81	18.50			
4560.00	32.572	180.722		832.67	4550.67	48.71	S	0.61 W
667294.419	N	664361.331	E	48.71	18.50			
4590.00	38.122	180.722		857.13	4575.13	66.05	S	0.83 W
667277.071	N	664361.112	E	66.06	18.50			
4620.00	43.672	180.722		879.80	4597.80	85.69	S	1.08 W
667257.439	N	664360.865	E	85.69	18.50			
4650.00	49.222	180.722		900.46	4618.46	107.42	S	1.35 W
667235.708	N	664360.591	E	107.43	18.50			
4680.00	54.772	180.722		918.92	4636.92	131.05	S	1.65 W
667212.079	N	664360.293	E	131.06	18.50			
4710.00	60.322	180.722		935.02	4653.02	156.35	S	1.97 W
667186.776	N	664359.974	E	156.36	18.50			
4740.00	65.872	180.722		948.59	4666.59	183.09	S	2.31 W
667160.036	N	664359.636	E	183.10	18.50			
4770.00	71.422	180.722		959.50	4677.50	211.02	S	2.66 W
667132.108	N	664359.284	E	211.03	18.50			
4800.00	76.972	180.722		967.67	4685.67	239.87	S	3.02 W
667103.256	N	664358.920	E	239.89	18.50			
4830.00	82.522	180.722		973.01	4691.01	269.38	S	3.40 W
667073.749	N	664358.548	E	269.40	18.50			
4860.00	86.301	180.722		975.62	4693.62	299.25	S	3.77 W
667043.872	N	664358.172	E	299.28	12.60			
4890.00	86.301	180.722		977.55	4695.55	329.19	S	4.15 W
667013.937	N	664357.794	E	329.22	0.00			
4920.00	86.301	180.722		979.49	4697.49	359.12	S	4.53 W
666984.002	N	664357.417	E	359.15	0.00			
4950.00	86.301	180.722		981.42	4699.42	389.06	S	4.91 W
666954.067	N	664357.039	E	389.09	0.00			
4980.00	86.301	180.722		983.36	4701.36	418.99	S	5.28 W
666924.131	N	664356.662	E	419.03	0.00			
5010.00	86.301	180.722		985.29	4703.29	448.93	S	5.66 W
666894.196	N	664356.284	E	448.97	0.00			
5040.00	86.301	180.722		987.23	4705.23	478.86	S	6.04 W
666864.261	N	664355.907	E	478.90	0.00			
5070.00	86.301	180.722		989.16	4707.16	508.80	S	6.42 W
666834.326	N	664355.530	E	508.84	0.00			
5100.00	86.301	180.722		991.10	4709.10	538.74	S	6.79 W
666804.391	N	664355.152	E	538.78	0.00			
5130.00	86.301	180.722		993.03	4711.03	568.67	S	7.17 W
666774.456	N	664354.775	E	568.72	0.00			
5160.00	86.301	180.722		994.97	4712.97	598.61	S	7.55 W
666744.521	N	664354.397	E	598.65	0.00			
5190.00	86.301	180.722		996.90	4714.90	628.54	S	7.93 W
666714.586	N	664354.020	E	628.59	0.00			
5220.00	86.301	180.722		998.84	4716.84	658.48	S	8.30 W
666684.650	N	664353.642	E	658.53	0.00			
5250.00	86.301	180.722		1000.78	4718.78	688.41	S	8.68 W
666654.715	N	664353.265	E	688.47	0.00			
5280.00	86.301	180.722		1002.71	4720.71	718.35	S	9.06 W
666624.780	N	664352.887	E	718.40	0.00			
5310.00	86.301	180.722		1004.65	4722.65	748.28	S	9.44 W
666594.845	N	664352.510	E	748.34	0.00			
5340.00	86.301	180.722		1006.58	4724.58	778.22	S	9.81 W
666564.910	N	664352.132	E	778.28	0.00			
5370.00	86.301	180.722		1008.52	4726.52	808.15	S	10.19 W
666534.975	N	664351.755	E	808.22	0.00			
5400.00	86.301	180.722		1010.45	4728.45	838.09	S	10.57 W
666505.040	N	664351.378	E	838.15	0.00			

5430.00	86.301	180.722	1012.39	4730.39	868.02 S	10.94 W
666475.104 N	664351.000 E		868.09	0.00		
5460.00	86.301	180.722	1014.32	4732.32	897.96 S	11.32 W
666445.169 N	664350.623 E		898.03	0.00		
5490.00	86.301	180.722	1016.26	4734.26	927.89 S	11.70 W
666415.234 N	664350.245 E		927.97	0.00		
5520.00	86.301	180.722	1018.19	4736.19	957.83 S	12.08 W
666385.299 N	664349.868 E		957.90	0.00		
5550.00	86.301	180.722	1020.13	4738.13	987.76 S	12.45 W
666355.364 N	664349.490 E		987.84	0.00		
5580.00	86.301	180.722	1022.06	4740.06	1017.70 S	12.83 W
666325.429 N	664349.113 E		1017.78	0.00		
5610.00	86.301	180.722	1024.00	4742.00	1047.63 S	13.21 W
666295.494 N	664348.735 E		1047.72	0.00		
5640.00	86.301	180.722	1025.93	4743.93	1077.57 S	13.59 W
666265.559 N	664348.358 E		1077.65	0.00		
5670.00	86.301	180.722	1027.87	4745.87	1107.50 S	13.96 W
666235.623 N	664347.980 E		1107.59	0.00		
5700.00	86.301	180.722	1029.81	4747.81	1137.44 S	14.34 W
666205.688 N	664347.603 E		1137.53	0.00		
5730.00	86.301	180.722	1031.74	4749.74	1167.37 S	14.72 W
666175.753 N	664347.226 E		1167.47	0.00		
5760.00	86.301	180.722	1033.68	4751.68	1197.31 S	15.10 W
666145.818 N	664346.848 E		1197.40	0.00		
5790.00	86.301	180.722	1035.61	4753.61	1227.24 S	15.47 W
666115.883 N	664346.471 E		1227.34	0.00		
5820.00	86.301	180.722	1037.55	4755.55	1257.18 S	15.85 W
666085.948 N	664346.093 E		1257.28	0.00		
5850.00	86.301	180.722	1039.48	4757.48	1287.11 S	16.23 W
666056.013 N	664345.716 E		1287.22	0.00		
5880.00	86.301	180.722	1041.42	4759.42	1317.05 S	16.61 W
666026.078 N	664345.338 E		1317.15	0.00		
5910.00	86.301	180.722	1043.35	4761.35	1346.98 S	16.98 W
665996.142 N	664344.961 E		1347.09	0.00		
5940.00	86.301	180.722	1045.29	4763.29	1376.92 S	17.36 W
665966.207 N	664344.583 E		1377.03	0.00		
5970.00	86.301	180.722	1047.22	4765.22	1406.85 S	17.74 W
665936.272 N	664344.206 E		1406.97	0.00		
6000.00	86.301	180.722	1049.16	4767.16	1436.79 S	18.12 W
665906.337 N	664343.828 E		1436.90	0.00		
6030.00	86.301	180.722	1051.09	4769.09	1466.72 S	18.49 W
665876.402 N	664343.451 E		1466.84	0.00		
6060.00	86.301	180.722	1053.03	4771.03	1496.66 S	18.87 W
665846.467 N	664343.074 E		1496.78	0.00		
6090.00	86.301	180.722	1054.96	4772.96	1526.59 S	19.25 W
665816.532 N	664342.696 E		1526.72	0.00		
6120.00	86.301	180.722	1056.90	4774.90	1556.53 S	19.63 W
665786.597 N	664342.319 E		1556.65	0.00		
6150.00	86.301	180.722	1058.84	4776.84	1586.46 S	20.00 W
665756.661 N	664341.941 E		1586.59	0.00		
6180.00	86.301	180.722	1060.77	4778.77	1616.40 S	20.38 W
665726.726 N	664341.564 E		1616.53	0.00		
6210.00	86.301	180.722	1062.71	4780.71	1646.33 S	20.76 W
665696.791 N	664341.186 E		1646.47	0.00		
6240.00	86.301	180.722	1064.64	4782.64	1676.27 S	21.14 W
665666.856 N	664340.809 E		1676.40	0.00		
6270.00	86.301	180.722	1066.58	4784.58	1706.21 S	21.51 W
665636.921 N	664340.431 E		1706.34	0.00		
6300.00	86.301	180.722	1068.51	4786.51	1736.14 S	21.89 W
665606.986 N	664340.054 E		1736.28	0.00		
6330.00	86.301	180.722	1070.45	4788.45	1766.08 S	22.27 W
665577.051 N	664339.676 E		1766.22	0.00		
6360.00	86.301	180.722	1072.38	4790.38	1796.01 S	22.65 W

665547.115 N	664339.299 E	1796.15	0.00			
6390.00	86.301 180.722	1074.32	4792.32	1825.95 S		23.02 W
665517.180 N	664338.922 E	1826.09	0.00			
6420.00	86.301 180.722	1076.25	4794.25	1855.88 S		23.40 W
665487.245 N	664338.544 E	1856.03	0.00			
6450.00	86.301 180.722	1078.19	4796.19	1885.82 S		23.78 W
665457.310 N	664338.167 E	1885.97	0.00			
6480.00	86.301 180.722	1080.12	4798.12	1915.75 S		24.16 W
665427.375 N	664337.789 E	1915.90	0.00			
6510.00	86.301 180.722	1082.06	4800.06	1945.69 S		24.53 W
665397.440 N	664337.412 E	1945.84	0.00			
6540.00	86.301 180.722	1083.99	4801.99	1975.62 S		24.91 W
665367.505 N	664337.034 E	1975.78	0.00			
6570.00	86.301 180.722	1085.93	4803.93	2005.56 S		25.29 W
665337.570 N	664336.657 E	2005.72	0.00			
6600.00	86.301 180.722	1087.87	4805.87	2035.49 S		25.67 W
665307.634 N	664336.279 E	2035.65	0.00			
6630.00	86.301 180.722	1089.80	4807.80	2065.43 S		26.04 W
665277.699 N	664335.902 E	2065.59	0.00			
6660.00	86.301 180.722	1091.74	4809.74	2095.36 S		26.42 W
665247.764 N	664335.524 E	2095.53	0.00			
6664.09	86.301 180.722	1092.00	4810.00	2099.44 S		26.47 W
665243.685 N	664335.473 E	2099.61	0.00			

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to GL 3,706' + KB 12'. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 180.722° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
Grid Convergence at Surface is 0.217°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 6664.09ft., the Bottom Hole Displacement is 2099.61ft., in the Direction of 180.722° (Grid).