District I
1625 N French Dr , Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St , Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr , Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

HOBBS OCD

JUL 12 2012

RECEIVED

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised August 1, 2011

Permit

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

[1] Operator Name and Address	[2] OGRID Number
DEVON ENERGY PRODUCTION COMPANY, L.P. 333 W. SHERIDAN, OKLAHOMA CITY, OK. 73102	6137
	[3] API Number 30-025-40681

[4] Property Code	[5] Property Name	[6] Well No
39329	PENNYPACKER 17 STATE	1H

[7] Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
O	17	21S	34E		330	S	1980	E	LEA

[8] Pool Information

BERRY; BONE SPRING, SOUTH, 96660

Additional Well Information

[9] Work Type	[10] Well Type	[11] Cable/Rotary	[12] Lease Type	[13] Ground Level Elevation
N	0	R	S	3756.1'
[14] Multiple	[15] Proposed Depth	[16] Formation	[17] Contractor	[18] Spud Date
No	TVD: 10885 MD:15304	Bone Spring	H & P	
Depth to Ground water 200'	Distance from nearest fresh water well 1.25 miles		Distance to nearest surface water 5 miles	

[19] Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
	17 ½"	13 3/8"	54.5#	1950	1670	Surface
	12 1/4"	9 5/8"	40#	6000	1715	Surface
	8 3/4"	5 1/2"	17#	10300	2215	5450'
	8 3/4"	5 1/2"	17#	15304		

Casing/Cement Program: Additional Comments

See attached Drilling Plan, Horizontal Plan & BOP

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
13 5/8"Triple Ram 2FZ35-35	3,000#	3,000#	Shaffer

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐. Closed Loop.

Printed name: Barry W Hunt

Title: Permit Agent

E-mail Address specialtpermitting@gmail.com

Date: 07/10/12 | Phone (575) 361-4078

OIL CONSERVATION DIVISION

Approved By:

Title: PETROLEUM ENGINEER

Approved Date: JUL 13 2012 | Expiration Date.

Conditions of Approval Attached

JUL 16 2012

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-40681	96660	BERRY; BONE SPRING, SOUTH

Property Code	Property Name	Well Number
39329	PENNYPACKER 17 STATE	1H

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, LP.	3756.1'

Surface Location

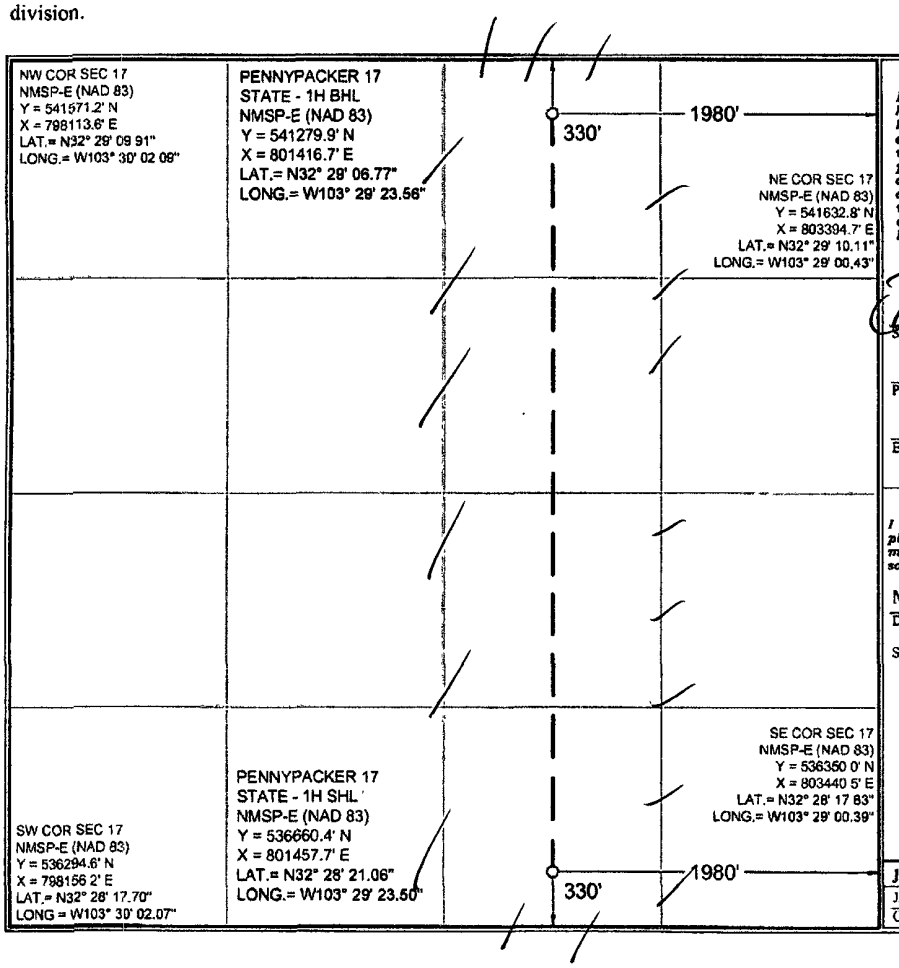
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	17	21 S	34 E		330	SOUTH	1980	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	17	21 S	34 E		330	NORTH	1980	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidated Code	Order No.
160			

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 or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Barry W. Hunt 7/10/12
Signature Date

Barry W. Hunt
Print Name

E-mail Address

SURVEYORS CERTIFICATION

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

MAY 29, 2012
Date of Survey

Signature and Seal of Professional Surveyor:

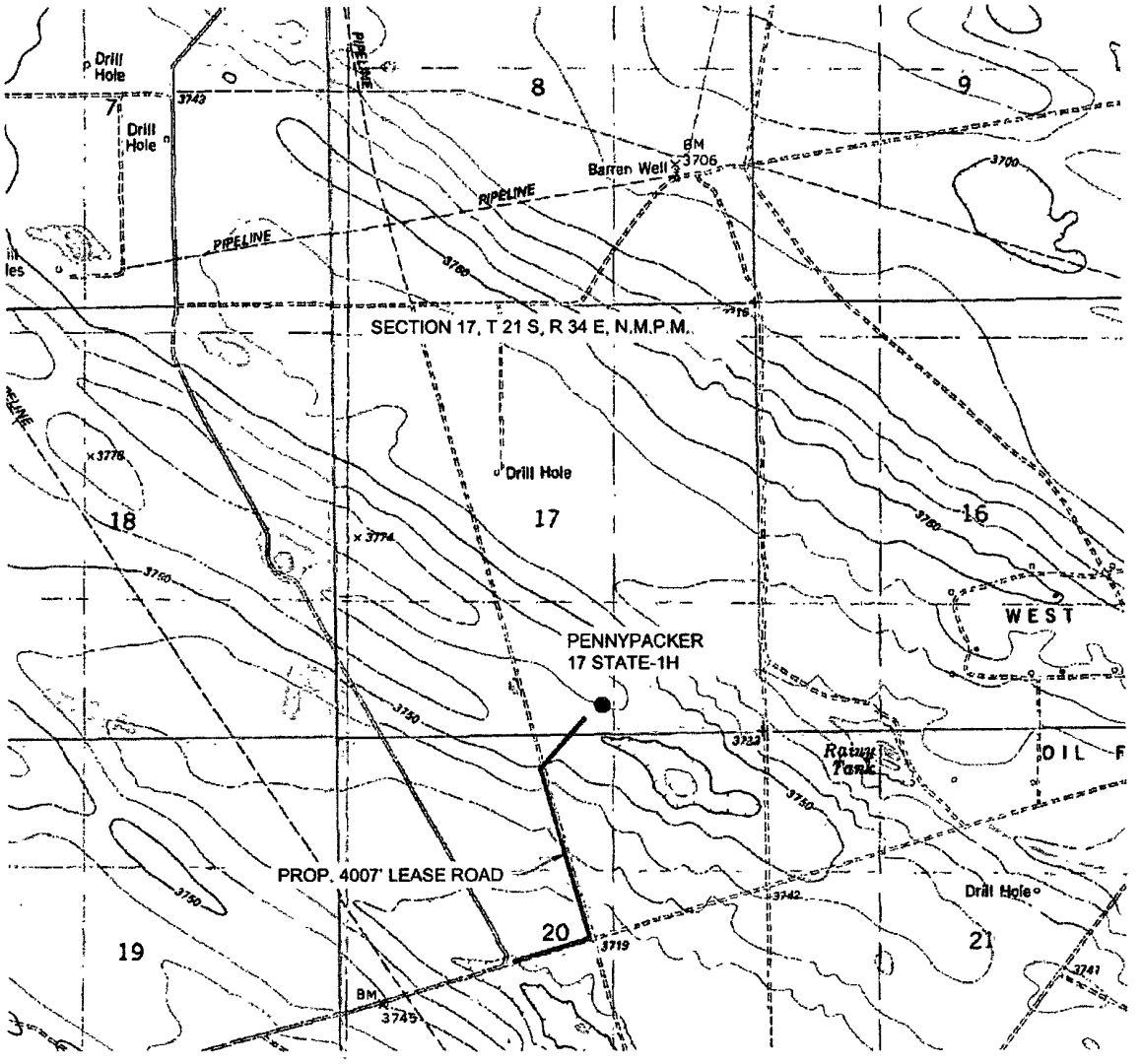
JAMES E. TOMPKINS
NEW MEXICO
14729
REGISTERED PROFESSIONAL LAND SURVEYOR

James

Job No.: WTC48541

JAMES E. TOMPKINS 14729
Certificate Number

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SECTION 17,T 21 S, R 34 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 330' FSL & 1980' FEL

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP.

WELL NAME: PENNYPACKER 17 STATE-1H

N
W
E
S

DRIVING DIRECTIONS:

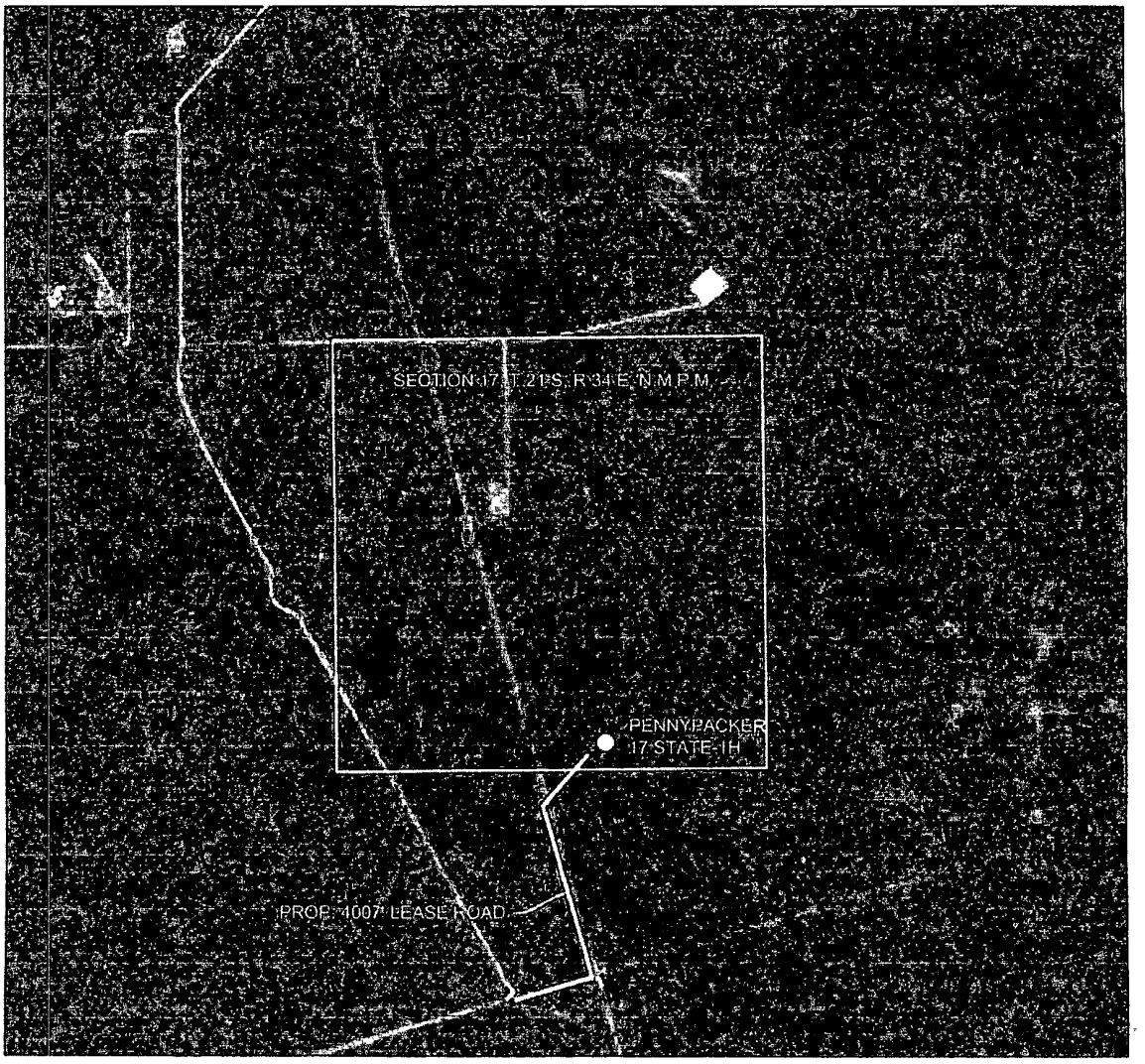
FROM JUNCTION OF STATE HIGHWAY 176 AND MARATHON ROAD. ABOUT 22.8 MILES WEST OF EUNICE, NM. GO EAST 2.2 MILES TO A LEASE ROAD TO THE RIGHT. GO SOUTH 3.8 MILES AND TURN LEFT ON A LEASE ROAD. GO EAST 0.2 MILES AND TURN LEFT ONTO AN EXISTING PIPELINE RIGHT OF WAY. GO NORTH ON SAID RIGHT OF WAY FOR 0.4 MILES TO A POINT WHERE SAID PROPOSED ROAD EXITS SAID RIGHT OF WAY AND THE LOCATION FLAG IS ±1092 FEET TO THE RIGHT.

WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S W. 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181

devon

JOB No.: WTC48541

AERIAL MAP



SCALE: 1" = 2000'

SECTION 17,T 21 S, R 34 E, N.M.P.M.

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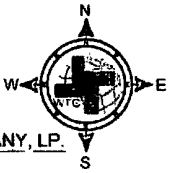
OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP.

WELL NAME: PENNYPACKER 17 STATE-1H



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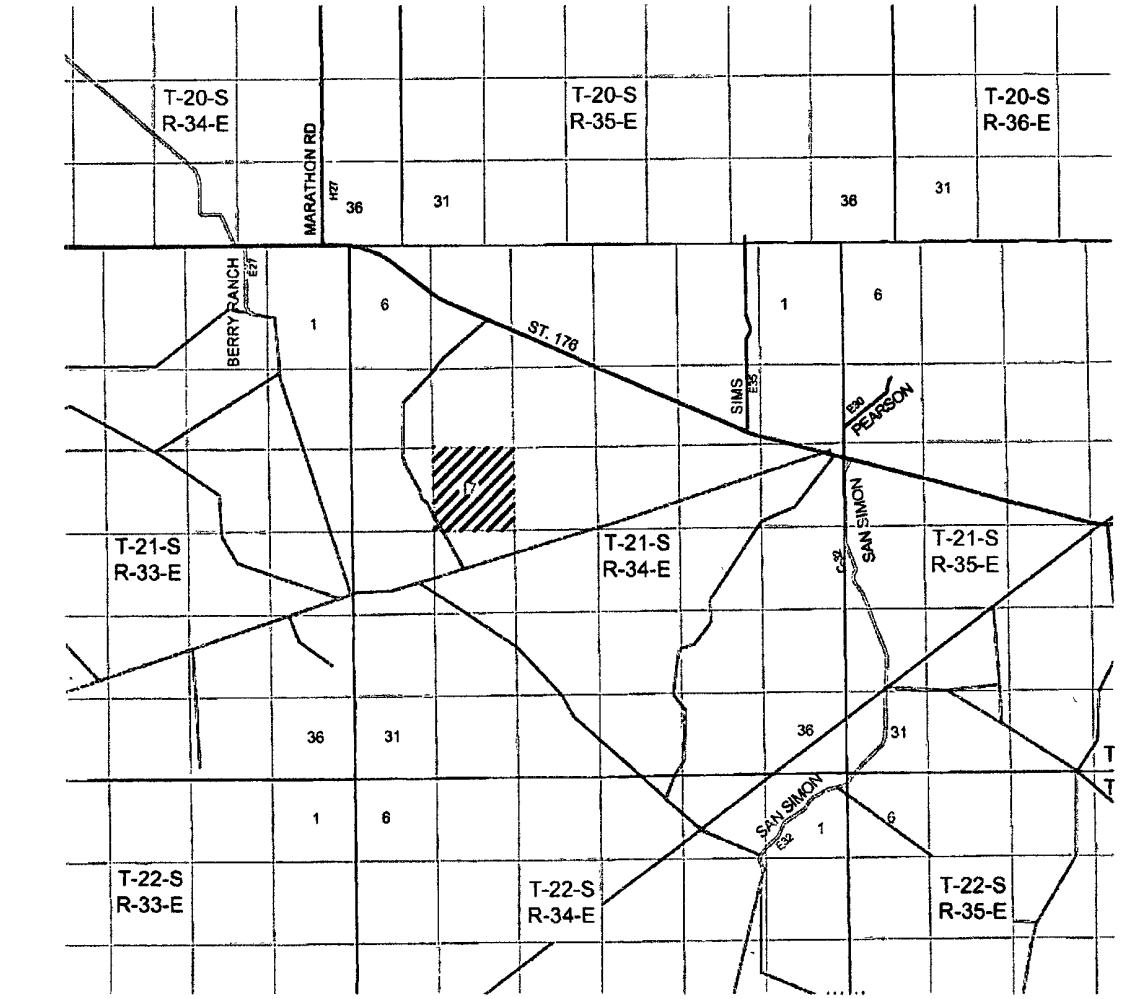
devon

JOB No.: WTC46541

VICINITY MAP



GRAPHIC SCALE OF MILES 1" = 2 MILE

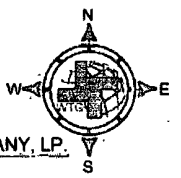
SECTION 17,T 21 S, R 34 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 330' FSL & 1980' FEL

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP.

WELL NAME: PENNYPACKER 17 STATE-1H



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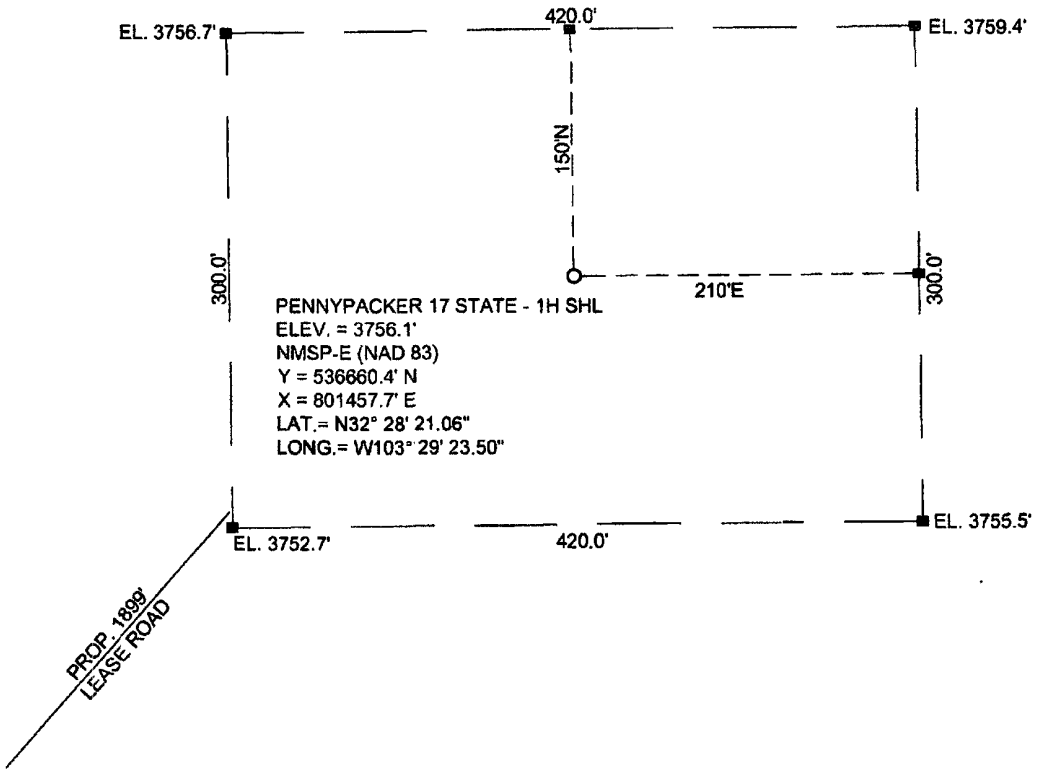
JOB No.: WTC48541

SITE LOCATION



SCALE: 1" = 100'

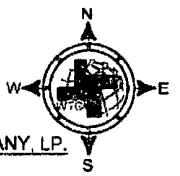
SECTION 17,T 21 S, R 34 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 330' FSL & 1980' FEL

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP.

WELL NAME: PENNYPACKER 17 STATE-1H



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JOB No.: WTC48541

Drilling Program / Surface Use Plan
Discipline-Specific Input Form

Pennypacker 17 State 1H Drilling Plan

1. Casing and Cementing Plan Summary

The surface fresh water sands will be protected by setting 13.375" casing at 1,950' and circulating cement back to surface. The fresh water sands will be protected by setting 9.625" casing at 6,000' and circulating cement to surface. The Delaware intervals will be isolated by setting 5-1/2" casing to total depth of 15,304' and circulating cement above the base of the 9-5/8" casing. All casing is new and API approved.

2. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight	Collar	Grade
17.5"	0 - 1,950'	13.375"	0 – 1,950'	54.5#	STC	J-55
12.25"	1,950' - 6,000'	9.625"	0 - 6,000'	40#	BTC	HCK-55
8.75"	6,000' - 10,300'	5.5"	0 - 10,300'	17#	LTC	P-110HC
8.75"	10,300' - 15,304'	5.5"	10,300' - 15,304'	17#	BTC	P-110HC

A pilot hole will be drilled to 12020' and plugged back with the following slurry:

Tail: 770 sacks Class H Cement + 0.4% bwoc CFR-3 + 0 1% bwoc HR-601 + 60.3% Water, 15.6 ppg **Yield**: 1.19 cf/sk **TOC @ 10250 ft**

3. Design Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13.375"	1.24	2.99	9.11
9.625"	1.37	1.27	3.86
5.5" LTC	1.77	2.20	1.71
5.5" BTC	1.68	2.09	6.75

4. Cementing Program (cement volumes based on at least 25% excess)

13-3/8" Surface

Lead: 1240 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg

Yield: 1.75 cf/sk

TOC @ surface

Tail: 430 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg

Yield: 1.35 cf/sk

9-5/8" Intermediate

Lead: 1290 sacks (65:35) Class C Cement:Poz (Fly Ash). + 5% bwow Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70 9% Fresh Water, 12.9 ppg

Yield: 1 85 cf/sk

TOC @ surface

Tail: 425 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg

Yield: 1.33 cf/sk

Pilot Hole

Tail: 770 sacks Class H Cement + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 60.3% Water, 15.6 ppg

Yield: 1.19 cf/sk

TOC @ 10250 ft

5-1/2" Production

1st Stage
Lead: 460 sacks (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.2% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg

Yield: 1.95 cf/sk

Tail. 1285 sacks (50:50) Class H Cement.Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0 5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58 8% Fresh Water, 14.5 ppg

Yield: 1.22 cf/sk

DV TOOL at 8000 ft

2nd Stage
Lead: 185 sacks Class C Cement + 3% bwoc Econolite + 0.125 lbs/sack Poly-E-Flake + 82 4% Fresh Water, 11.4 ppg

Yield: 2 87 cf/sk

Tail: 285 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water, 14.8 ppg

Yield: 1.33cf/sk

TOC @ 5450 ft

TOC for All Strings:

Surface:	0
Intermediate:	0
Production:	5450 ft

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.

5. Pressure Control Equipment

BOP DESIGN: The BOP system used to drill the intermediate and production holes will consist of a 13-5/8 " 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the prior casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

6. Proposed Mud Circulation System:

Depth Range	Mud Weight	Viscosity	Fluid Loss	Type System
0 - 1,950'	8.4-9.0	28-34	NC	Fresh Water
1,950' - 6,000'	9.8-10.2	28-32	NC	Brine
6,000' - 15,304'	8.6-9.0	28-32	NC-12	Fresh Water

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 having the appropriate connections will be on the rig floor at all times.
c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13.375" casing shoe until the 5.5" casing is cemented. Breathing equipment will be on location upon drilling the 13.375" shoe until total depth is reached.

8. 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. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP of 3,600 psi and estimated BHT 145°. No H2S is anticipated to be encountered.

9. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as a rig becomes available following BLM approval. Move in operations and drilling is expected to take 32 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

10. Location and Types of Water Supply:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

11. Methods of Handling Waste Material:

a. Drill cuttings will be disposed of in a closed loop system.
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 an approved sanitary landfill.
c. The supplier will pick up salts remaining, including broken sacks, after completion of well.
d. 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 sent to a closed loop system.
f. Disposal of fluids to be transported by the following companies:
    i. American Production Service Inc, Odessa TX
    ii. Gandy Corporation, Lovington NM
    iii. I & W Inc, Loco Hill NM
    iv. Jims Water Service of Co Inc, Denver CO

devon

PROJECT DETAILS: Lea County (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

G
T M

Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.98°

Magnetic Field
Strength: 48667.9snT
Dip Angle: 60.41°
Date: 7/2/2012
Model: IGRF2010

PATHFINDER®
A Schlumberger Company

Project: Lea County (NAD83)
Site: Pennypacker 17 state
Well: #1H
Wellbore: OH
Plan: Plan #1 (#1H/OH)

WELL DETAILS: #1H

Ground Elevation.: 3756.1
RKB Elevation: KB = 19 @ 3775.1usft (McVay 8)
Rig Name: McVay 8

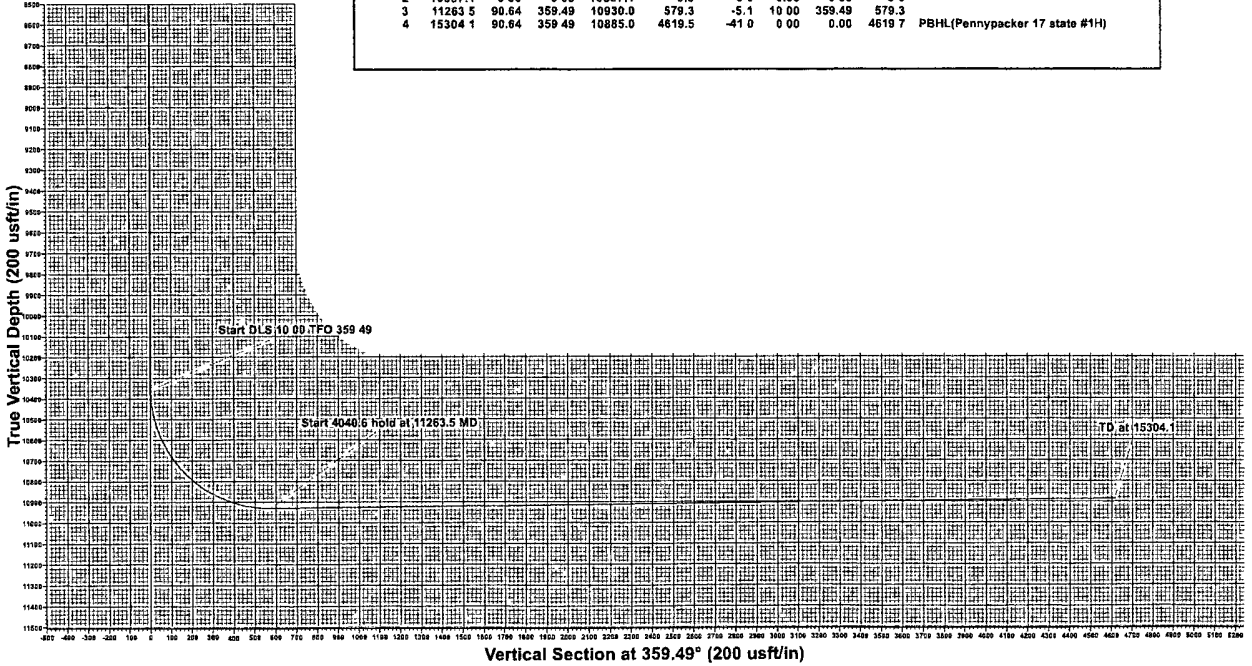
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	536660.400	801457.700	32° 28' 21.060 N	103° 29' 23.504 W	

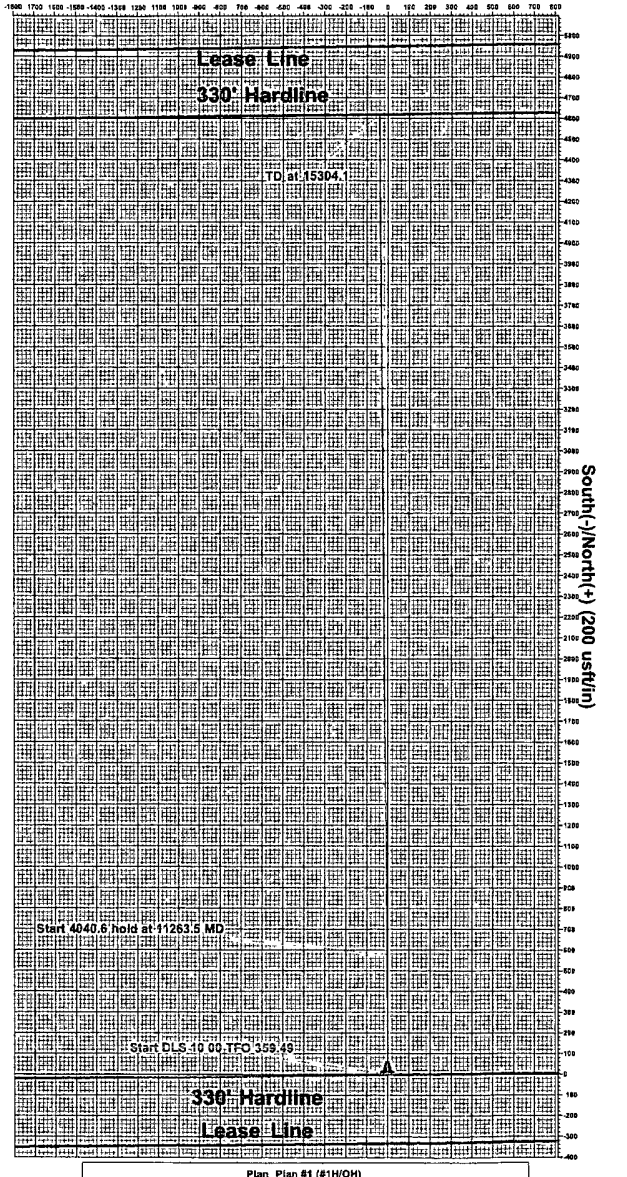
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(Pennypacker 17 state #1H)	10885.0	4619.5	-41.0	541279.900	801416.700	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	10357.1	0.00	0.00	10357.1	0.0	0.0	0.00	0.00	0.0	
3	11263.5	90.64	359.49	10930.0	579.3	-5.1	10.00	359.49	579.3	
4	15304.1	90.64	359.49	10885.0	4619.5	-41.0	0.00	0.00	4619.7	PBHL(Pennypacker 17 state #1H)





Plan: Plan #1 (#1H/OH)
Created By: Sam Biffle Date: 15:08, July 02 2012
Checked: _____ Date: _____