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

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State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Divsiion
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
Energen Resources Corporation 3300 N. A St., Bldg. 4, Ste. 100 Midland, Tx 79705	162928
	[3] API Number 30- 025-03732

[4] Property Code	[5] Property Name	[6] Well No
27820	West Lovington Strawn Unit	25

[9] Proposed Pool 1	[10] Proposed Pool 2
Lovington; Strawn, West	

[7] Surface Location

UL or lot no	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
2	6	16 S	36 E		1025	North	1953	East	Lea

[8] Proposed 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
4	6	16 S	36 E		1016	North	660	West	Lea

Additional Well Location

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
E	O	R	Fee	3956'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
	13,000	Strawn		

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48.00#	364'	275sx C	Surface
11"	8 5/8"	32.00#	3709'	2050sx C	Circulated
7 7/8"	5 1/2"	17.00#	11,540'	See procedure	circulated
4 3/4"	2 7/8"	6.5#	12,990'	See procedure	

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any. Use additional sheets if necessary.

This APD is for re-entry into the TA'd well formerly known as the Snyder E #1 and drill a sidetrack lateral through the Strawn formation.

See attached procedure.

Permit Expires 2 Years From Approval Date Unless Drilling Underway
Re-Entry

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Carolyn Larson

Printed name: Carolyn Larson

Title: Regulatory Analyst

E-mail Address: carolyn.larson@energen.com

Date: November 7, 2008 Phone: (432) 684-3603

OIL CONSERVATION DIVISION

Approved by:

Title: PETROLEUM ENGINEER

Approval Date: NOV 12 2008 Expiration Date:

Conditions of Approval Attached ☐

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HOBBS (NM)

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Frances Dr.
Santa Fe, NM 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

API Number	Pool Code	Pool Name
30-025-03732	40875	Lovington; Strawn, West

Property Code	Property Name	Well Number
27820	WEST LOVINGTON STRAWN UNIT	25

OGRID No.	Operator Name	Elevation
162928	ENERGEN RESOURCES CORPORATION	3956'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	6	16 S	36 E		1025'	NORTH	1953'	EAST	LEA

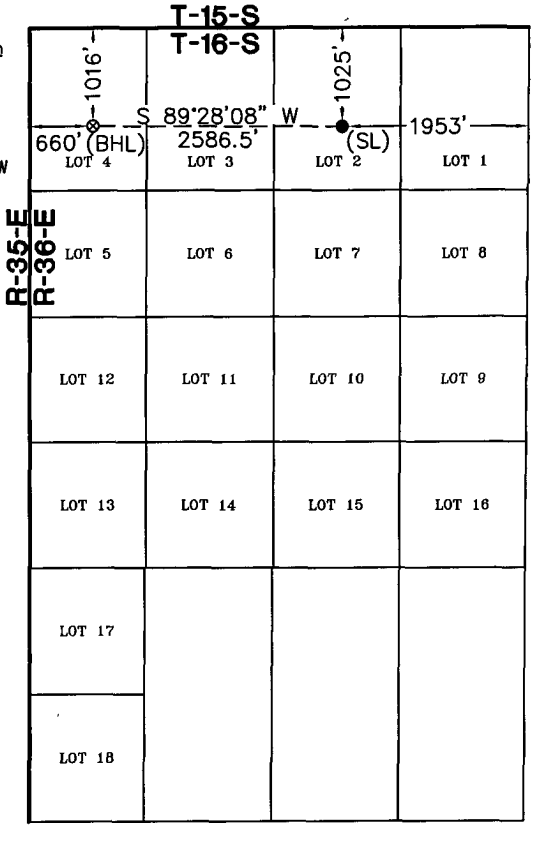
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	6	16 S	36 E		1016'	NORTH	660'	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
148.53			

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

Bottom Hole Location
Plane Coordinate
X = 786,273.3
Y = 715,565.8
Geodetic Coordinate
Lat. 32°57'49.23" N
Long. 103°23'59.92" W
(NAD '27)



Surface Location
Plane Coordinate
X = 788,859.2
Y = 715,589.8
Geodetic Coordinate
Lat. 32°57'49.24" N
Long. 103°23'29.57" W
(NAD '27)

NOTE:

1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

OPERATOR CERTIFICATION

I hereby certify the 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 interestin 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 a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Signature Date

Carolyn Larson 11/7/08
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

October 20, 2008
Date of Survey

Signature & Seal of Professional Surveyor

MACON McDONALD LLP
NEW MEXICO
12185
REGISTERED PROFESSIONAL SURVEYOR

W.O. Num. 2008-1198

Certificate No. MACON McDONALD 12185

ENERGEN REOURCES
WLSU # 25

1. **ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS**

Rustler	1827'
Glorieta	6225'
Strawn	10900'
TD (MD)	12,890' Horizontal from 10900-12890' (approx 1990' Lateral)

2. **ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, or Gas**

Upper Permian Sands	0-100' Fresh Water
Wolfcamp	10,520' Oil and Gas
Strawn	10,900' Oil and Gas

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The Surface Fresh Water is protected by 13 3/8" surface casing at 364', cement was circulated to surface.

3. **MINIMUM SPECIFICATIONS for PRESSURE CONTROL**

The blowout preventer equipment (BOP's) will consist of a double ram type 5000# WP preventer and annular preventer (2500# WP). Units will be hydraulically operated, the BOP will consist of pipe and blind rams. All BOP's and accessory equipment will be tested in accordance with the Onshore Oil and Gas order No. 2. Before drilling out of any casing BOP's and accessory equipment will tested to 5000# high, 1000# low, annular preventor to 2500#, 1000# low.

Pipe Rams will be operationally checked each 24 hrs. Blind rams will be operationally checked on each trip. These checks will be noted on the daily tour sheets.

A. A Kelly cock will be kept in the drill string at all times.
B. A full opening drill pipe stabbing valve (inside BOP) with proper connections will be on the floor at all times.
C. H2S detectors will be continuously monitoring the well site.

4. **ABNORMAL PRESSURES, CONDITIONS, TEMPERATURES, and POTENTIAL HAZARDS**

No abnormal pressures or temperatures are anticipated. No H2S, other hazardous gases or fluids have been encountered, reported or known to exist in this area. No major lost circulation zones have been reported in offsetting wells.

5. **MUD PROGRAM**

This well will be drilled to TD with a XCD Polymer mud system from 4450' to TD. Mud weight will be 9.4-10.2 #/gal. Sufficient mud materials will be kept on location to meet any unanticipated loss of circulation and/ or weight gain. A closed loop system will be used.

6 **LOGGING,CORING or TESTING**

There is no anticipated logging or coring to be done except as part of horizontal portion of hole.

ENERGEN RESOURCES

WLSU # 25

7. **CASING PROGRAM**

HOLE SIZE	INTERVAL	OD Casing	WEIGHT, GRADE
17 ½"	0-364'	13 3/8"	48#, H-40, STC
11"	0-4709'	8 5/8"	32#, J-55, LTC
7 7/8"	0-10,900	5 ½"	17#, HCL-80, BTC
4 ¾"	10,600- 12,990'	2 7/8"	6.5#, N-80

8. **CEMENTING PROGRAM**

13 3/8" Surface	Cemented to surface with 275 sxs.
8 5/8" Intermediate	Cemented to surface with 2050 sxs.
5 ½"Production	Cement will be calculated to circulate to surface.
2 7/8" Production	Open Hole Lateral with OH packer, strata-port system

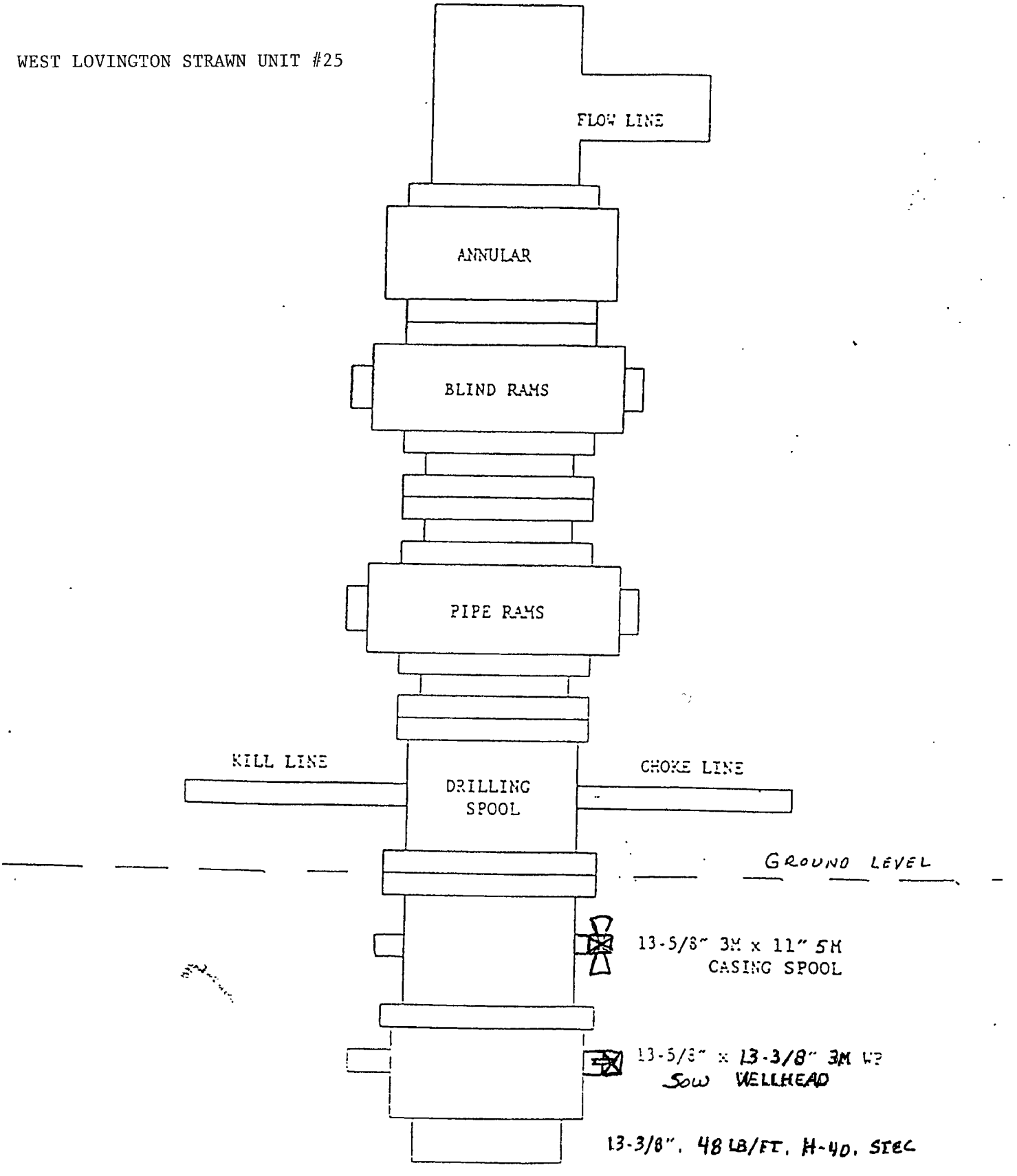
9. **ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS**

Road and location will have to be reconstructed for the re-entry in to the area and some power lines will have to be rerouted. Date of actual start of operations is unknown at this time. We will notify the OCD landowner 5 days ahead of time. Actual re-entry and drilling of well should take 35-40 days. If well is productive and additional 7-10 days will be needed to finish completion and testing. Well will be produced to an existing battery not on the location.

ENERGEN RESOURCES CORPORATION

BOP EQUIPMENT

WEST LOVINGTON STRAWN UNIT #25



MINIMUM BOP REQUIREMENT 5,000 PSI W.P.

Energen Resources

WLSU #25

Initial Side Track and Vertical Hole Plan

1. Rebuild and expand location as indicated on rig plat. Dig out cellar around wellhead, to 5'x5'x5'. Move power line on North side of location back 250' to the West (power line runs E and W) of the location. Get electricians to wire up transformers so that we can run 5-6 trailers, water and satellite systems off of existing electricity.

2. MIRU Horizontal rig. Open well up and bleed off any pressure, ND wellhead, PU 1 joint of DP or tubing with 8 5/8" AD-1 packer and TIH, set packer 25' below wellhead in casing, back off joint and pull out of hole. Fill hole with water. Cut off 8 5/8" casing 26-30" below GL depending on height of "B:" section (New 71/16" 5K with 2 side valves.). Weld on new 8 5/8" SOW x 7 16" 5K casing head with 1 side BP and a 3000# BV on the other (CHECK measurements carefully before cutting off old head so that top of "B" section will be GL or slightly below.) TIH and release AD-1 packer, TOOH. NU spool, BOP's, Hydril, choke manifold, HCR valve and rotating head. Test BOP stack, manifold to 5000# High, 1000# Low, Hydril to 2500# High, 1000# Low by Torqued Up. Hold 30 mins each test and chart. Have roustabout crew RU gas separator and related items to choke manifold and pits. Install flare lines at least 100' from gas separator.

3. PU 7 7/8" bit, string mill, DC's and DP, TIH to cement plug that is set at 4456'. If plug is found at 4456' and is suitable to set whipstock on, circulate hole clean with cut BW and TOOH. If Plug is not acceptable or not at the desired depth, be prepared to TOOH , RU E-line and set CIBP at desired depth.

4. PU Weatherford 1 Step Whipstock with watermelon mill and TIH, RU Scientific Drilling and orientate whipstock. Set whipstock and verify that whipstock is set and then verify orientation. If everything is OK TOOH with wireline and RD, shear off mill and start cutting window. After window is cut and cleaned out, TOOH with mill, TIH with opening mill and open window up to accept a 7 7/8" bit. TOOH and lay down tools.

5. RU Baker InteQ tools, BHA, TIH and start sidetrack following Baker's design. Mud and hole cleaning properties to be maintained to provide optimum hole cleaning and lubricity. Bit, motor selection to be decided in conjunction with Baker InteQ personnel.

6. Drill sidetrack as designed and turn vertical as soon as possible, continue drilling well to an approximate TD of 10,900' where we will work to turn hole horizontal for 2-300' before running 5 ½" casing and cementing in place.

7. At TD, circulate and condition mud, make 20 stand short trip, TIH, circulate out any oil or gas and if hole is stable, run fluid caliper to get volume for cement calculations. TOOH, LDDP and DC's. RU casing crew to run production casing.

8. RUNNING OF 5 ½" Casing. PU and thread lock Weatherford float shoe, 2 jts. 5 ½" casing, Weatherford float collar and tack weld all connections. PLACE 2 Rigid Centralizers per joint and continue PU of casing and thread locking/ tack welding all connections together until 300' or pipe is in vertical section of hole. Continue picking up casing, making up to recommended torque, place turbo centralizers on every other joint for 20 joints, then run casing to surface.

9. RU and circulate 2 casing volumes while batch mixing Tail slurry to proper density. RU Schlumberger and cement according to recommendation. We will not be able to reciprocate casing. If cement does not circulate wait 8 hrs and run temperature survey.

10. Even if cement did not circulate to surface, ND BOP's, set slips, cut off, finish ND of stack, make final cut on casing, NU "B" Section.

11. Re- Nipple up BOP stack, change rams to 2 7/8" and begin Horizontal portion of well.

ENERGEN RESOURCES

WLSU # 25

HORIZONTAL WELL PLAN

1. Open well up, PU 4 ¾" bit (PDC), Baker directional tools ,DC's, and DP. TIH to float collar and drill out, continue TIH to float shoe and drill out. If 5 ½" casing was set around curve, proceed to drill lateral in the proper direction

   If not, then proceed to turn well horizontal following Bakers Directional team's recommendations. Geologist on location, in office and reservoir engineers are to be monitoring progress 24 Hrs. a day to ensure proper direction, course angle, etc.and are to suggest course changes early enough so that side tracks are minimized. Consultants on location are to keep constant track of hole being drilled, hole stability, and flow conditions. We will try to drill this section balanced but expect at any time to encounter abnormal pressure conditions and be prepared to take appropriate actions.

2. TRIPS: ON ALL TRIPS HOLE WILL BE KEPT FULL, CAPACITY AND DISPLACEMENT VOLUMES will be calculated, pumped and recorded whether using TRIP TANK, or BBLS/STROKE method. ANY DEVIATION from calculated volumes will require IMMEDIATE investigation. When problem is resolved, note what the problem was and actions taken to correct it if mechanical in nature, if a well problem contact drilling superintendent immediately.

3. TRIPS: If oil and gas are present and the well is static while circulating and drilling and will flow with pumps shut down we will TOOH into vertical section and weight up to overcome ECD + 0.2 lb/gal. If this weight is sufficient to control well, continue TOOH, if not build weight up as needed but not as to cause a loss of fluid. Continue with trip. On trip back in hole stop above window and circulate out kill mud with mud used to drill with and put kill mud into storage. This mud will need to be rolled and conditioned for next trip. Mud engineer will need to check fluid properties of stored mud every other day and report condition on mud check sheet as to condition and kind of maintenance required.

4. NOTE: Several days before TD, order out liner assembly (liner, packers, strata-ports, x-overs, subs, etc.). Liner will be 2 7/8", 6.5#, N-80 tubing with ULTRA-FLUSH connections. Check to see that all the various parts and pieces will fit together. Peak Completion Technology will furnish the OH packers, strata-ports, X-overs, RSB, down jet circulating sub/float and all necessary subs. They will also bring out string reamers to run when reaming lateral prior to running liner. Geologists, engineers, drilling superintendent will configure liner assembly and get to field.

5. At TD of lateral, make 25 std short trip, TIH to TD, circulate and condition hole, TOOH to LD directional tools. LD enough DP to ream out lateral 1 joint at a time. Peak personnel are to be on location at all times from this point on until liner is in place and RSB packer tested.

6. TOOH, LD reamers, PU Peak Completion Assembly (ALL connections, dimensions of tools, shear value of ALL pinned parts to be sure correct pins were used (THIS IS CRITICAL!!).

7. PU,MU liner assembly on DP and TIH –SLOWLY-liner assembly will act like a giant piston and place unnecessary pressure down hole possibly causing a lost of fluid then a kick when hydrostatic pressure decreases.

8. At top of window, check hole stability, weight of string and weight indicator, check everything else including pumps, mud, drilling line, tongs, etc. that can be checked BEFORE starting liner into lateral.

9. Proceed CAUTIOUSLY and SLOWLY with liner in to window and lateral. Call if you have encounter ANY difficulty with getting liner to TD. DO NOT FORCE LINER, THIS WILL CAUSE PACKERS TO SET.

10. If everything is OK and liner in place, proceed to set RSB and open hole packers as directed by Peak personnel on location. To set liner you will need a HP pump truck (capable of pressuring up on liner to 5000#). After assembly is set, pressure up on annulus to check that RSB is holding OK. Bleed off DP and watch for flow. If there is no flow everything is OK, if there is flow then check valve is leaking. Release off RSB and pull up hole.

11. Displace hole with kill mud and TOOH, LDDP and setting tool.

12. ND BOP, NU 7 1/16" 5K frac valve from BTI. Jet and clean pits, release equipment and rig. Move out drilling rig.

13. Proceed to Completion Procedure.

Energen Resources

Snyder "E" #1 (P&A)

Lea County, New Mexico

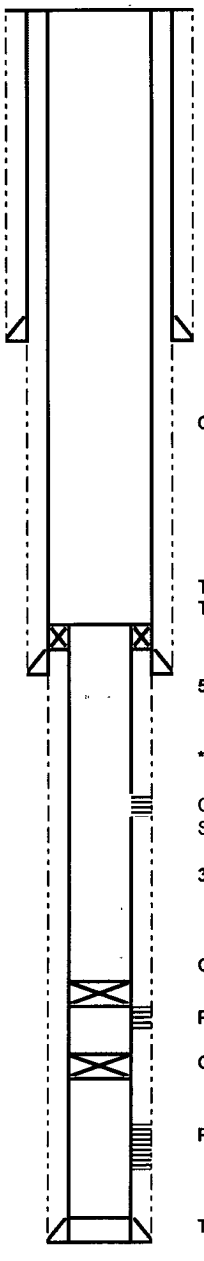
Elevation KB: 3967'

Elevation GL: 3956'

Location: 1016' FNL, 1980' FEL, Sec 6, T-16-S, R-36-E

Spudded: 55-20-19586 **Completed:** 7-15-1958

Currently PA'd **API #:** 30-025-03732



Surface csg:
13 3/8" 48 #/ft, H40 @ 364'
Cmt w/ 275 sx class C
Topped out 50 sx
17 1/2" hole

364'

Cement plug @ 1700'

Top of Cmt plug: 4456'
Top Of Liner: 4528'

Intermediate csg:
8 5/8" 32#/ft, J55
Set @ 4709'
Cmt w/2050 sx
Cement circulated
11" hole

4709'

50 sk Cement plug @ 4781'

*****CBL shows cmt to top of liner*****

Casing leak 6013-6078"
Squeezed with 100 sx class C (9/86)

30 sk Cement plug @ 7526

TOC: 8240' calc

CIPB: Set at 10300' **w/30sx cement cap**

Perfs: 10,416-28', 10,349-59' (2/8/08)

CIPB: Set at 10538' w/2sx cement cap

Perfs: Permo-Penn 10588 - 602', 10612 - 10650' (4 SPF) 7/58
Perf-add 10654 606, 10672 -676, 10680-689 (2 SPF) 9/86

PBTD: 10,695'

Production Liner:
5 1/2" 17#/ft, N-80
Set @ 4528' to 10725'
Cmt w/300 sx Dia Mix "A"
7-7/8" hole

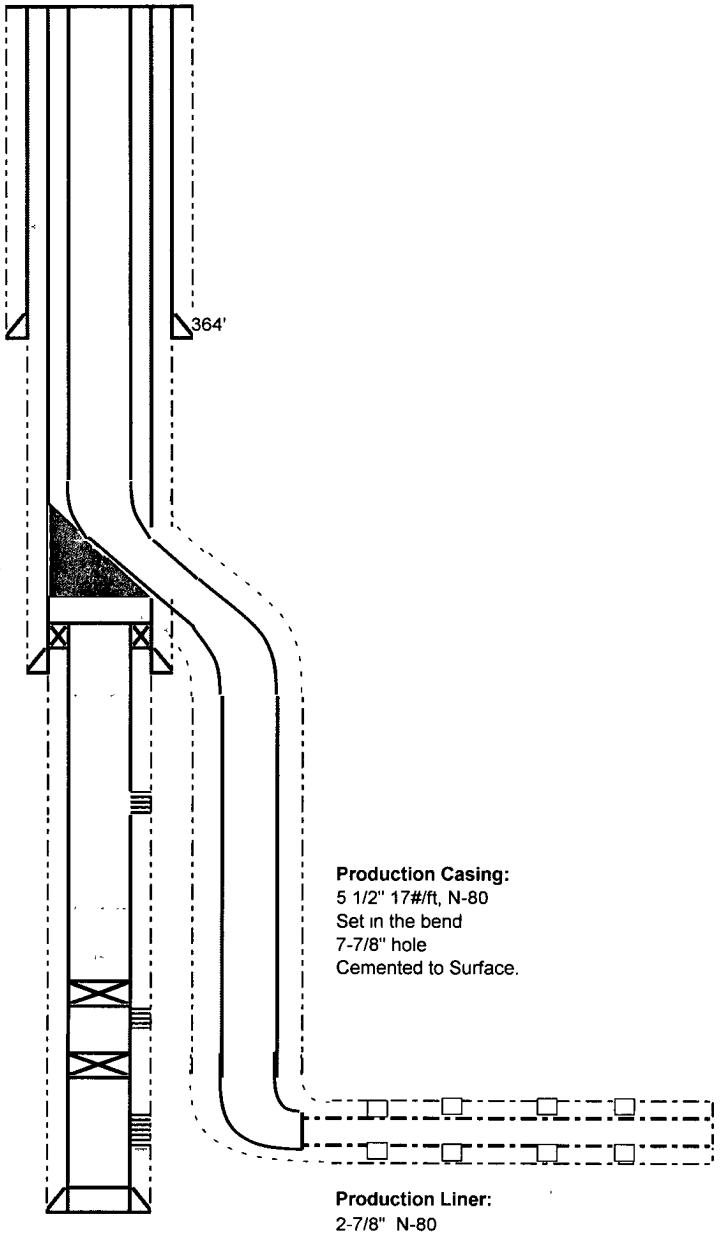
TD: 10,727'

Energen Resources

WLSU #25
(Formerly Snyder "E" #1)
Lea County, New Mexico

Elevation KB: 3967'
Elevation GL: 3956'
Existin Location: 1016' FNL, 1980' FEL, Sec 6, T-16-S, R-36-E
Terminus Location: 1016' FNL, 660' FWL, Sec 6, T-16-S, R-36-E
API #: 30-025-03733

Proposed Wellbore



Surface csg:
13 3/8" 48 #/ft, H40 @ 364'
Cmt w/ 275 sx class C
Cement circulated
17 1/2" hole

Whipstock
~4,500'

Intermediate csg:
8 5/8" 32#/ft, J55
Set @ 4709'
Cmt w/2050 sx
Cement circulated
11" hole

TOC: 8240' calc

Production Casing:
5 1/2" 17#/ft, N-80
Set in the bend
7-7/8" hole
Cemented to Surface.

Production Liner:
2-7/8" N-80
Openhole packer/port system
4-3/4" Hole