

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
June 16, 2001

Oil Conservation Division

Submit to appropriate District Office

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

FEB 28 2011

HOBBSOCD

☐ AMENDED REPORT

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

¹ Operator Name and Address Legend Natural Gas III, Limited Partnership 410 West Grand Parkway South Suite 400 Katy, TX 77494		² OGRID Number 258894
³ Property Code 305418	⁵ Property Name Winchester "5" State	³ API Number 30-015-35342
⁹ Proposed Pool 1 WILDCAT WOLF CAMP (GAS) (97489)		¹⁰ Proposed Pool 2

⁷ Surface Location									
UL or lot no. K	Section 5	Township 25S	Range 28E	Lot Idn	Feet from the 1004	North/South line South	Feet from the 1986	East/West line West	County Eddy

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no. K	Section 5	Township 25S	Range 28E	Lot Idn	Feet from the 833.30	North/South line South	Feet from the 1172.61	East/West line West	County Eddy


Additional Well Information				
¹¹ Work Type Code P	¹² Well Type Code G	¹³ Cable/Rotary N/A	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3007
¹⁶ Multiple No	¹⁷ Proposed Depth 12,833	¹⁸ Formation Morrow	¹⁹ Contractor N/A	²⁰ Spud Date N/A

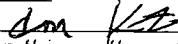
²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated FOC
17-1/2	13-3/8	48	650	575	Surface
12-1/4	9-5/8	36	2600	900	Surface
8-3/4	7	26	9897	1899	Surface
	4-1/2 (liner)	11.6	9050-12833	300	9050

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.

Legend Natural Gas III, LP proposes to P&A the Morrow formation and recompleate the subject well to the Cisco Canyon formation, as per the attached procedure.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	
Signature: 	
Printed name: B BROCK HENDRICKSON	
Title: PRODUCTION ENGINEER	
E-mail Address: bhendrickson@lng2.com	
Date: 2/22/2011	Phone: (281) 644-5900

OIL CONSERVATION DIVISION	
Approved by:	
Denied	
DENIED BY Oil Conservation Division	
On 3/2/11 see attached letter	
APD Reviewed by 	
For more information on this matter, please call Donna Mull @ (575) 393-6161 ext 115 or email donna.mull@state.nm.us	
DENIED because of Financial assurance per Rule 19.15.5.9.(A)(1).	

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State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised July 16, 2010

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-35342	² Pool Code 97489 96333	³ Pool Name WILDCAT; WOLFCAMP (GAS)
⁴ Property Code 305418	⁵ Property Name Winchester "S" State	⁶ Well Number 1
⁷ OGRID No. 258894	⁸ Operator Name Legend Natural Gas III, Limited Partnership	⁹ Elevation 3007

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	5	25S	28E		1004	South	1986	West	Eddy

¹¹ 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
K	5	25S	28E		833.30	South	1172.61	West	Eddy

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁶ 	¹⁷ 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 in a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>R Brock Hendrickson</u> Date: <u>03/01/2011</u> Printed Name: <u>R Brock Hendrickson</u> E-mail Address: <u>bhendrickson@lnp2.com</u>
	¹⁸ 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 supervision, and that the same is true and correct to the best of my belief. Date of Survey: _____ Signature and Seal of Professional Surveyor: _____ Certificate Number: _____

Winchester 5 State #1
Unit K, Sec 05, T 25 S, R 28 E
30-015-35342
Eddy County, New Mexico

Cisco Canyon Recompletion 1 Stage

Surf csg: 13-3/8", 48#, H-40, ST&C csg @ 650'. Circ cmt to surf.
Intm csg: 9-5/8", 36#, J-55, LT&C csg @ 2,600'. Circ cmt to surf.
Prod csg: 7", 26#, P-110, LT&C csg @ 9,897'. DV tl @ 5,004'. Circ cmt to surf.
Prod lnr: 4-1/2", 11.6#, P-110, LT&C csg @ 12,833'. FC @ 12,796', TOL @ 9,050'.
Liner Cmt: TOC @ ~11,704' (by CBL - 11/20/2007)
Current: PBTD @ 12,796'. Drift = 3.875". Capacity = 0.0155 bbls/ft.
Burst = 9,960 psi (Treating @ 80% = 8,000 psi)
BHA: 4-1/2" AS1-X pkr, SN, & 2-3/8", 4.6#, N-80 tbg @ 12,256'
Formation: Sulphate Draw; Wolfcamp NW (pool # 96333, well # 305418)

Completion Procedure

Note: All cement will be Class G or equivalent, mixed at 15.6 ppg with a 1.25 cf/sx yield.

1. MI 8 – 500 bbl (or 10 – 400 bbl) frac tanks and 1 flow back tank. Fill the frac tanks with 6% KCl water w/additives.
2. MIRU PU.
3. MI \pm 5 jts 2-3/8", 4.6#, N-80, EUE, 8rd tbg.
4. TOH w/BHA. TIH w/3-7/8" bit, 4-1/2" csg scraper, & 2-3/8" tbg.
5. CO to 12,250'. TOH w/BHA.
6. TIH w/4-1/2" CICR, squeeze tl, & 2-3/8" tbg to surface.
7. Set CICR @ 12,208' & pressure test to 200 psig.
8. MIRU cmt truck.
9. **Plug #1 (12,108'-12,308'):** Mix 7 sx cement and pump a 100' plug below cement retainer. Mix additional 7 sx cement and spot a 100' plug to cap the CICR. **[Morrow Top - 12,208']**
10. TOH with 1 stand of tbg. Roll hole with water. TOH w/BHA.
11. RD cmt truck.
12. Pressure test the casing to 1,500 psig for 10 minutes then test casing to 3,500 psig for 5 minutes. Record pressure test on chart.

13. MIRU wireline and mast truck. RU full lubricator. RIH w/3.875" gauge ring fr/surface to new PBTD (12,108'). POOH w/gauge ring.
14. Run GR/CCL /CBL/CNL fr/PBTD (12,108') to 9,050' (Liner Top) w/800 psig on the casing, during logging. Correlate to OXY Winchester 5 State #1 Array Induction Log dated 11/20/2007.
15. Perf Squeeze Holes with a 4-1/2" csg gun with 8 JSPF (Owen HSC-3125-310A, 11.0 gm, 45 deg phasing, 0.58" dia., 5.18" penetration, 8 holes). POH with csg gun & RD WL truck.

Squeeze Perfs

PERF	CCL
11,300'	

16. TIH w/4 -1/2" CICR, squeeze tl, & 2-3/8" tbg to surface.
17. Set CICR @ 11, 290' & pressure test to 200 psig.
18. RU cmt truck.
19. Break circulation and attempt to monitor returns behind li ner hanger.
 - *If circulation is established, mix 120 sx cement and pump a block squeeze below CICR.*
 - *If circulation is NOT established, pump 250 gals 15% HCL & mix 65 sx cement and pump a block squeeze below CICR.*
20. RDMO cmt truck.
21. ALLOW CMT TO SET FOR 24 HR S.
22. TIH w/3 -7/8" bit, bit sub, & 2-3/8" tbg to surface. DO cmt & CO to PBTD (12,108'). TOH w/BHA.
23. RU wireline and mast truck. RU full lubricator. Run GR/CCL/CBL fr/ 11,750' to 10,900', or 100' above TOC.
 - *If TOC is below 11,000', subsequent block squeezes will be performed, as indicated above.*
 - *If TOC is \geq 11,000', continue to step #24.*
24. Pressure test the 4-1/2" casing to 3,500 psig for 10 minutes then test casing to 5,000 psig for 5 minutes. Record pressure test on chart.
25. NU frac valve.

26. RU wireline and mast truck. RU full lubricator.

27. Perf Cisco Canyon with a 3-1/8" csg gun with 2 JSPF (Owen SDP-3125-411NT4, 21.0 gm, 135 deg phasing, 0.34" dia., 32.86" penetration, 84 holes). POH with csg gun & RD WL truck.

Cisco Canyon Perfs

PERF	CCL
11,250'-11,258'	
11,220'-11,236'	
11,110'-11,128'	

28. MIRU acid equipment and pressure test surface lines to 8,650 psig. BD perfs with 6% KCl water and EIR. Acidize Cisco Canyon perfs from 11,110'-11,258' with 2,000 gals of 15% NEFE HCl acid and 126 Bio-balls at 12 BPM down csg. Flush with 15,975 gals 6% KCl water (2 bbls over flush). Record ISIP, and 5" SIP. Ball-off acid. Surge balls back several times. RDMO acid truck.

29. Install flowback manifold. Flowback well thru a choke manifold to flowback tank. Start with an 8/64" choke. Increase choke size as appropriate.

30. If well is determined to be unproductive, continue to step #31.

31. MIRU WH isolation tool. MIRU frac equip.

32. Review treatment schedule with service company personnel and confirm treatment rate, stage fluid volumes, proppant volumes, type and amount of flush.

33. Frac Cisco Canyon perfs down casing at 60 BPM. Pump 18# XL gelled fluid w/98,600 lbs 20/40 Super LC proppant followed by 17,400 lbs 20/40 Super LC proppant coated with Superset Activator. Flush with 15,875 gals 6% KCl water. Record ISIP & 5" SIP.

Stage 1	Volume	Fluid	Conc.	Proppant/Balls
1 - Acid	2,000	7.5% FE Acid		
2 - Flush	15,975	6% KCl Water		
3 - Pad	11,500	18# XL Gelled Fluid		
4 - Proppant Laden Fluid	5,800	18# XL Gelled Fluid	0.5 lbm/gal	Super LC-20/40
5 - Proppant Laden Fluid	5,800	18# XL Gelled Fluid	1 lbm/gal	Super LC-20/40
6 - Proppant Laden Fluid	13,050	18# XL Gelled Fluid	2 lbm/gal	Super LC-20/40
7 - Proppant Laden Fluid	21,250	18# XL Gelled Fluid	3 lbm/gal	Super LC-20/40
8 - Proppant Laden Fluid	5,800	18# XL Gelled Fluid - Superset	3 lbm/gal	Super LC-20/40
9 - Flush	15,875	Water Frac G - R (20)		

34. RDMO frac equip.

35. Shut well in for a **minimum** of **4 HOURS**.

36. Install flowback manifold. Flowback well thru a choke manifold to flowback tank. Start with an 8/64" choke. Increase choke size as appropriate.

37. MIRU-PU. ND frac valve. NU and pressure test BOP.

38. TIH w/3-7/8" bit, bit sub, and 2-3/8" tubing. CO to PBTD (12,108') and circulate wellbore clean. TOH w/tbg & bit.

39. TIH w/WLEG, SN, & ± 356 jts 2-3/8" tbg. Land tubing at $\pm 11,226'$. SN at $\pm 11,225'$. ND BOP. NU WH.

40. If necessary, RU swab line and lubricator. Swab well until clean fluid is obtained and well kicks off.

41. RDMO PU.

42. Report rates and pressures to Brock Hendrickson.

Regulatory:

1. Submit completion sundry to BLM & NM OCD

Equipment:

1. 3-7/8" bit & bit sub

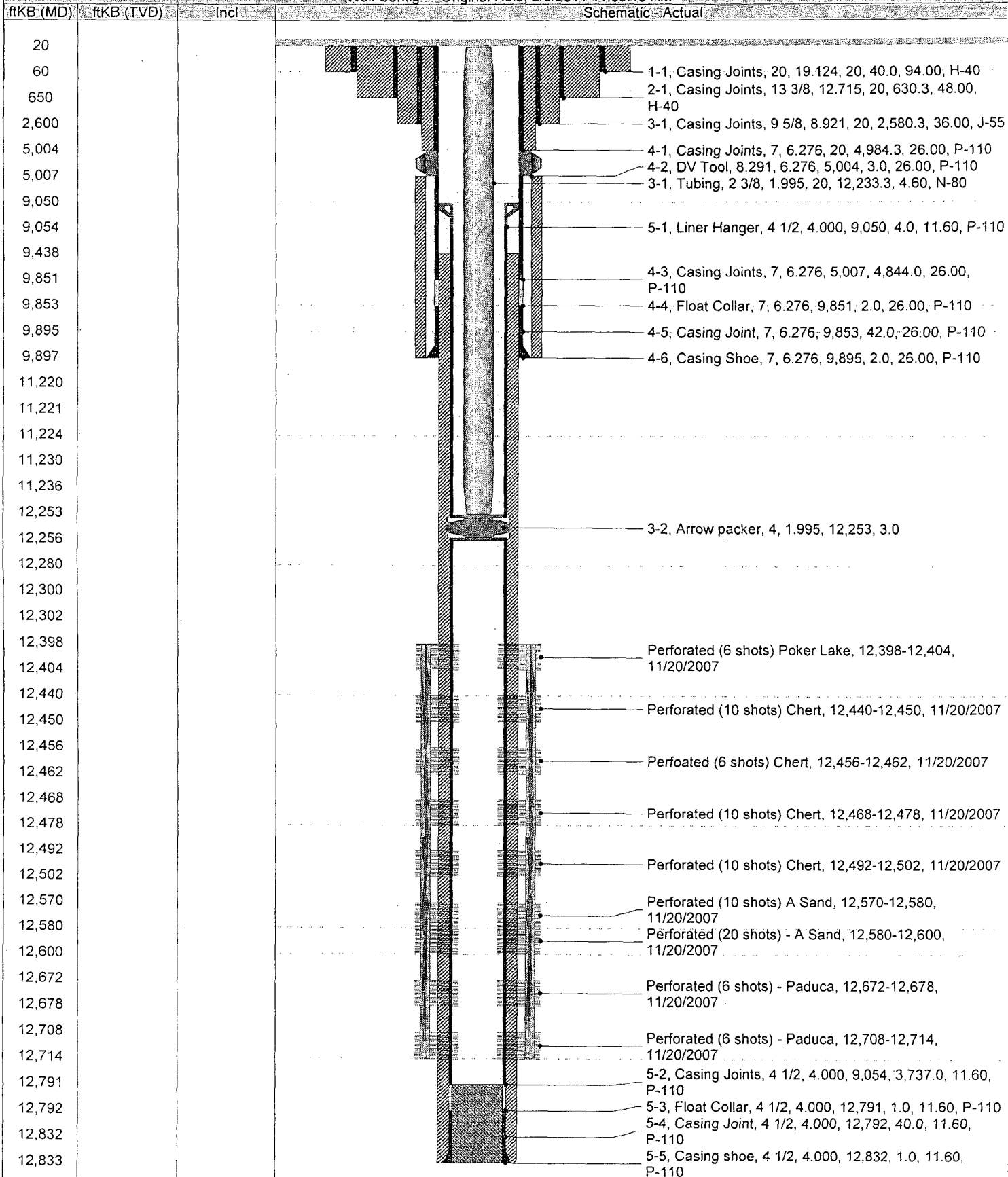
Schematic - Current

Well Name: Winchester 5 State #1

Most Recent Job

AFE Number Ground Elevation (ft) Original KB Elevation (ft) Total Depth (ftKB) PBTD (All) (ftKB)

Well Config: - Original Hole, 2/9/2011 11:05:10 AM





410 W. Grand Parkway South
Suite 400
Katy, TX 77494

(281) 644-5900
Fax: (281) 644-5901

February 25, 2011

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1625 N. French Dr.
Hobbs, NM 88240

RECEIVED
FEB 28 2011
HOBBBSUCD

Application for Permit to Drill, Re-Enter, Deepen
Plugback, or add a Zone
Winchester "5" State No. 1
Legend Natural Gas III, LP

To Whom It May Concern;

Please find enclosed a Form C-101 for the above referenced well. If you have any questions or need any additional information please do not hesitate to give me a call at (281) 644-5952 or email me at CValk@lng2.com.

Thanks,

Cassandra Valk

Cassandra Valk
Staff Attorney