

ENERGEN RESOURCES CORPORATION
Langlie Lynn Queen Unit #11, API # 30-025-20521

600' FNL, 600' FEL
Sec. 27, T-23-S, R-36-E
Lea County, NM

The LLQU #11 was completed in 7/16/63 as a 7Rivers-Queen producer. The well is not currently economic to produce. Temporary abandonment was attempted March, 2017, but the well failed the post-TA MIT, so needs to be P&A'd.

For scope changes during work, stop and discuss with engineering before proceeding

API:	30-025-20521	KB:	3386'	PBTD:
Spud Date:	23201	GLE:	3376'	TD: 3730'

Plug and Abandon Procedure

SAFETY CONSIDERATIONS

Observe all Energen Guidelines for PPE and H2S Safety
Observe perforation and contractor safety guidelines
Wireline and explosives on location while perforating
Workstring should be in good condition and tested to 5000 psi.
BOP should be in good working condition and tested
Rig anchors will need to be tested prior to MIRU
Keep a TIW valve open and on the rig floor at all times
Notify the NM OCD 24 hours prior to starting TA operations
Meet with engineer, superintendents, and consultant prior to beginning the job,
to assure that everyone is agreement with the procedure.

- 1 MIRU Well Service Unit.
- 2 Bleed well down.
- 3 NDWH
- 4 Use production tubing as workstring or:
Unload and rack 3600' 2-3/8" workstring. Maintain kill truck w/10 ppg brine on location.
- 5 NU adapter flange and BOP for 4-1/2" csg and workstring. Test to 500 psi above working pressure.
- 6 RIH, tag cmt above CIBP (CIBP @3464', cmt @3402').
- 7 RIH w/ workstring and circulate hole to 10 ppg mud and pressure test to 500 psi
- 8 Perf and squeeze 40 sxs Class "C" cement at ~~2825'-2695'~~ (Yates), WOC and tag. **3030 - 2900**
- 9 Perf and squeeze 75 sxs Class "C" cement at ~~4350'-1240'~~ (top salt), WOC and tag. **1433 - 1333**
- 10 Perf and squeeze cmt from 373' to surface (shoe)
- 11 ND BOP. Top off well with cement. Verify cement to surface all strings.
- 12 RD and clean location.
- 13 Cut off all casing strings at base of cellar or 3' below restored ground level.
- 14 Cover wellbore with metal plate welded in place or with cement cap.
- 15 Erect capped abandonment marker inscribed with well information.
- 16 Cut off dead man anchors and fill in cellar. RDMO.
- 17 Clean and restore location to natural condition and fulfill any and all regulatory requirements.

ENERGEN RESOURCES, INC.

Langlie Lynn Unit #11

Lea County, NM

Current Conditions: 3/24/2017
Shut-in Producer

Conductor:
None

Surface Casing:
7-5/8" 24# Smls, ST&C
@ 323' in 11" hole
Cemented to surface
W/200 sx Cmt + 4% gel ✓

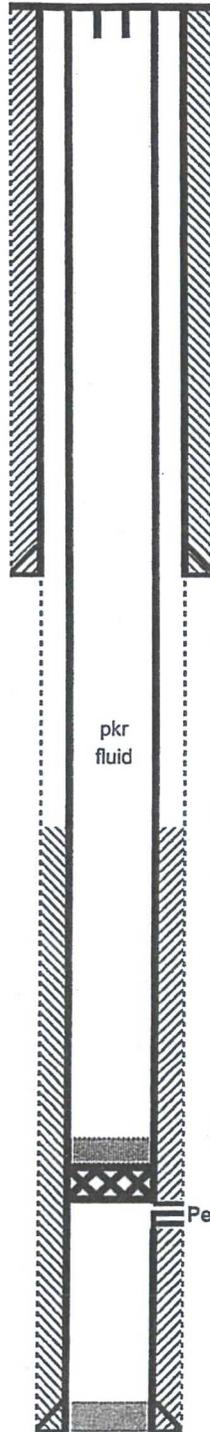
Intermediate Casing:
None

Production Casing:
4 1/2" 9.50# J-55 ST&C
@ 3730' in 6-3/4" hole
300 sx cement
TOC 2400' by TS ✓

GL Elevation: 3376'
KB Elevation: 3386'
Location: 660' FNL, 660' FEL,
Sec 27, T-23-S, R-36-E
Spud: 07/09/1963
API No: 30-025-20521
updated: 3/24/17 by KRP

Completed: 07/16/1963

Tbg hanger, 1 jt 2-1/16" tbg,
seating nipple under pack off



Casing leak: 322-354' Squeezed (8/91)

Note in Wellcore: 3/17/15; Shut in with casing leak.

3/22/17: Failed MIT, need to P&A

3/21/17:
CIBP @3464' w/ cmt, tagged cmt 3402'

Perfs: 3532-3542, 3550-3554 56 total holes
3580-82, 84-86,
3602-04, 20-22, 41-42, 44-46, 56-58, 64-66,
3676-79, 86-88, 90-92, 96-98' (2-JSPF 7/63)
Frac: 40,000 gal lease oil + 60,000# sand (7/63)

TD = 3730'

T/salt 1383

B/salt 2828

Notes 2965

TR 3224

Qu 3634

*7 Rivers
Queen*

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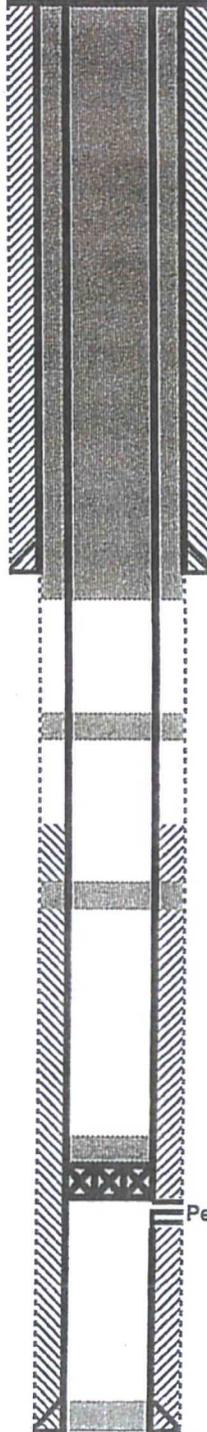
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@ 3730' in 6-3/4" hole

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TOC 2400' by TS

Proposed Wellbore P&A'd Producer



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Location: 660' FNL, 660' FEL,

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Perf and sqz 373' to surface (shoe)

Perf and sqz 75 sx 1350'-1240', (top salt)

WOC and tag

1433 - 1333

Perf and sqz 40 sx 2825-2695' (Yates)

WOC & tag

3030 - 2800

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Frac: 40,000 gal lease oil + 60,000# sand (7/63)

TD = 3730'

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. 1st Street, 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 & Natural Resources

Form C-102
Revised August 15, 2000

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-20521		² Pool Code 37240		³ Pool Name Langlie Mattix 7RVRS/Queen/GB	
⁴ Property Code 23267		⁵ Property Name Langlie Lynn Queen Unit			⁶ Well Number 11
⁷ OGRID No. 162928		⁸ Operator Name Energen Resources Corporation			⁹ Elevation 3375.7

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
A	27	23S	36E	NMPM	660	North	660	East	Lea

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

¹² Dedicated Acres 40	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		<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Carolyn Larson</i> Signature Carolyn Larson Printed Name Regulatory Analyst Title 4-30-04 Date</p>
		<p>Certificate Number</p>

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Federal Wells
Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.**

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
620 E. Greene St.
Carlsbad, New Mexico 88220-6292
www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. 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 final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, redistribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation

equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos
Supervisory Petroleum Engineering Tech
575-234-5909, 575-361-2648 (Cell)

Arthur Arias
Environmental Protection Specialist
575-234-6230

Henryetta Price
Environmental Protection Specialist
575-234-5951

Shelly Tucker
Environmental Protection Specialist
575-234-5979

Trishia Bad Bear, Hobbs Field Station
Natural Resource Specialist
575-393-3612