UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED OMB NO. 1004-0137 Expires: October 31, 2014

WELL COMPLETION OR RECOMPLETION REPORT AND LOGISTICS 05 2014 5. Lease Serial No. Jicarilla Apache Lease 417 Farmington Field Off Oil Well la. Type of Well Gas Well Dry Other Faith Manage G. If Indian, Allottee or Tribe Name Work Over Deepen Plug Back Difference of Land Manage Block Difference of Land Manage Block Plug Back Difference of Land Manage Bl b. Type of Completion: New Well 7. Unit or CA Agreement Name and No. Other: 2. Name of Operator Logos Operating, LLC 8. Lease Name and Well No. Jicarilla O 3E 3. Address 4001 North Butler Ave, Building 7101 Farmington, NM 87401 3a. Phone No. (include area code) 505-330-9333 9. API Well No. 30-043-21165 4. Location of Well (Report location clearly and in accordance with Federal requirements)* 10. Field and Pool or Exploratory Lindrith Gallup-Dakota, West 919' FSL & 1738' FEL, UL O At surface 11. Sec., T., R., M., on Block and Survey or Area Sec. 10, T22N, R3W Amended Same as above. API# At top prod. interval reported below 12. County or Parish 13. State At total depth Same as above. Sandoval NM 14. Date Spudded 15. Date T.D. Reached 16. Date Completed 01/17/2014 17. Elevations (DF, RKB, RT, GL)* 12/11/2013 12/16/2013 D&A Ready to Prod. 7072' GL 18. Total Depth: MD 19. Plug Back T.D.: 20. Depth Bridge Plug Set: MD MD TVD 6870' TVD TVD 6775' Yes (Submit analysis) 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) Was well cored? Z No Was DST run? ✓ No ☐ Yes (Submit report) GR/CCL/CBL/Neutron/Density/Electric Yes (Submit copy) Directional Survey? **√** No 23. Casing and Liner Record (Report all strings set in well) No. of Sks. & Stage Cementer Slurry Vol. Size/Grade Hole Size Wt (#/ft) Bottom (MD) Cement Top* Amount Pulled Top (MD) Type of Cement Depth (BBL) 12-1/4" 9-5/8" J-55 36 503 N/A 254 sks 15 bbls 63 bbls surface 7-7/8" 5-1/2" P-110 17 lo 6858 4805 *2400' 10 bbls 1710 sks 582 bbls RCUD FEB 14'14 ATI CANS. DIV **Tubing Record** Depth Set (MD) Packer Depth (MD) Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Size 2-7/8" not yet Producing Intervals Perforation Record Formation Perf. Status Perforated Interval No. Holes Top Bottom Size A) Gallup-Dakota 4711' 6870' 5258'-6732' 0.38" 192 open B) \overline{C} D) 27. Acid, Fracture, Treatment, Cement Squeeze, etc. Amount and Type of Material Depth Interval 6540'-6732 Frac w/48bbls of 15% HCL; 2338bbls Slickwater 70Q N2, 10,382# 100Mesh, 84,560# 40/70 Ottawa Sand,2.6mmscf N2 6236'-6378 Frac w/48bbls of 15% HCL; 3937bbls Slickwater, 6,775# 100Mesh, 66,561# 40/70 Ottawa Sand 5610'-5770" Frac w/48bbls of 15% HCL; 1317bbls Slickwater 70Q N2, 10,329# 100Mesh, 83,600# 40/70 Ottawa Sand, 2.6mmscf N2 5258'-5544 Frac w/48bbls of 15% HCL; 5323bbls Slickwater, 9,454# 100Mesh, 96,999# 40/70 Ottawa Sand 28. Production - Interval A Date First Test Date Water Oil Gravity Production Method Hours Test Gas Gas BBL Produced Tested Production BBL MCF Corr. API Gravity Flowtest will be reported on 1st Delivery. 0 0 0 Well Status Choke Tbg. Press. Csg. 24 Hr. Oil Gas Water Gas/Oil Rate BBL MCF BBL Ratio Flwg. Press. Size 0 0 0 28a. Production - Interval B Production Method Water Oil Gravity Gas Test Gas Date First Test Date Hours Oil Produced Tested Production BBI MCF BBL Corr. API Gravity Well Status Water Gas/Oil Choke Tbg. Press. Csg. 24 Hr Mil Gas BBL MCF BBI Rate Ratio Flwg. Press



FEB 06 2014

^{*(}See instructions and spaces for additional data on page 2)

| 28h Proc | luction - Int | erval C | | | | | | | | | | | |
|---|--|-------------------------|-----------------------------------|-------------|-----------------------------|-------------------------------------|--------------------------------------|----------------|-----------|-----------------------------|-----|-------------|--|
| Date First | | Hours | Test | Oil | Gas | Water | Oil Gravity | Gas | P | Production Method | | | |
| Produced | | Tested | Production | BBL | MCF | BBL | Corr. API | Gravity | , | | | | |
| Choke | Tbg. Press | . Csg. | 24 Hr. | Oil | Gas | Water | Gas/Oil | Well St | tatus | | | | |
| Size | Flwg. SI | Press. | Rate | BBL | MCF | BBL | Ratio | | | | | | |
| 28c. Prod | uction - Inte | erval D | | _L | | | | | | | | | |
| Date First | | Hours | Test | Oil | Gas | Water | Oil Gravity | Gas | | roduction Method | | | |
| Produced | | Tested | Production | BBL | MCF | BBL | Corr. API | Gravity | | | | | |
| Choke | Tbg. Press | | 24 Hr. | Oil | Gas | Water | Gas/Oil | Well St | atus | | | | |
| Size | Flwg. SI | Press. | Rate | BBL | MCF | BBL | Ratio | | | | | | |
| 29. Dispo | sition of Ga | s (Solid, u | sed for fuel, ve | nted, etc.) | | | . <u> </u> | | | | | | |
| 30. Sumn | ary of Porc | us Zones | (Include Aqui | fers) | _ · · · · | | | 31 Fo | rmation (| (Log) Markers | | | |
| | · | | • | · | | | | 31. 10 | manon | (Log) Maikers | | | |
| Show a includi recover | ng depth int | t zones of perval teste | porosity and co d, cushion use | ontents the | ereof: Cored of open, flowi | intervals and all ng and shut-in | l drill-stem tests, pressures and | | | | | | |
| Formation Top Bo | | | Bottom | | Desc | riptions, Conte | ents etc | | Name Top | | | | |
| | | | | | | | | | | rune | | Meas. Depth | |
| Nacimiento Ojo Alamo | | 830 2030 | | | | | | | | | | | |
| Kirtland Fruitland | | 2179 | | | | | | | | | | | |
| Pictured Clif Lewis | fs | 2410 2500 | | ļ | | | | | | | | | |
| Cliff House Point Looko | ut | 3900 4518 | | | | | | | | | | | |
| Mancos Gallup | | 4711 5342 | | | | | | | | | | | |
| Greenhom Graneros | | 6535 6597 | | | | | | | | | | | |
| Dakota | | 6629 | | | | | | | | | | | |
| 32. Additio | onal remark | s (include | plugging proc | edure): | | | | | | | | | |
| Box 19. F | PBTD is 67 | 75' per C | OH log & 680 | 00' per C | BL. | | | | | | | | |
| Box 23. * | Cement to | p is after | 4th squeez | e. | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 33. Indicate | e which iten | ns have be | en attached by | placing a | check in the a | appropriate box | tes: | | | | | | |
| | | | | | | Geologic Report | | Renort | | Directional Survey | | | |
| ☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Sundry Notice for plugging and cement verification | | | | | | Core Analysis Other: | | | | | | | |
| 34. I hereb | y certify tha | t the foreg | oing and attac | hed inform | nation is comp | olete and correc | t as determined fr | om all availab | le record | s (see attached instruction | s)* | | |
| Na | me (please j | orint) Tar | mra Session | s | | | Title Operation | ns Technici | ian | | | _ | |
| Sig | nature | Tam | Sess | in | | | Date 02/05/20 | 14 | | | | - | |
| Citle 18 U.S | 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 | | | | | | | | | | | | |

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 an false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECORDED.

FEB 00 2011

FORM APPROVED OMB NO. 1004-0137 Expires: October 31, 2014

| • | W | /ELL | COMP | LETIO | N OR I | RECOMPLI | ETIOI | N REF | PORT | | | | | ~'' ' ' ' ' | ease Se | | | | |
|--|----------------------------|-----------------|-------------------|-----------------------|---|-----------------|---------------------------------|--|----------------------|---|-----------------------------------|-------------------------|-----------------------------------|--|-----------------------|-------------------------------------|--------------------|-----------------|---|
| | | | | | | | | | | Bura | <u> </u> | 120 | <u> </u> | | | pache Lea | | | |
| Ia. Type of Well ☐ Oil Well ☐ Gas Well ☐ Dry ☐ Other b. Type of Completion: ☐ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr., | | | | | | | | | Jica | 6. If Indian, Allottee or Tribe Name Jicarilla Apache Nation | | | | | | | | | |
| | | (| Other: | | | | | _ | | | | | | 7. L | Jnit or C | A Agreeme | ent Nai | ne and No. | |
| 2. Name of Logos Op | Operator erating, LI | LC | | | | | | | | | | | • | | ease Na Irilla O | me and We | ll No. | | |
| 3. Address | 4001 North | Butler Av | ve, Building | 7101 | | | | | Phone | | lude ar | ea coa | le) | 9. A | PI-Well | -Ne | | | |
| 4 Location | Farmington, | | | early and | in accord | lance with Fede | ral rea | 1 - | 05-330- | 9333 | | | | 10 | 043-21 Field an | 166)-00 d Pool or E | SN Explora | tory | |
| T. Eccution | | • | 738' FEL | • | in accord | unce min reac | rai req | unemen | | | | , | | Line | drith Ga | allup-Dako | ota, W | est | |
| At surfac | | | | | | | | | | | | | | 11. | Sec., T., Survey o | R., M., on or Area Sec | Block :. 10, T2 | and 22N, R3W | |
| At top pr | od. interval | reporte | | Same as | above. | | | | | | | | | 12. | County | or Parish | | 13. State | |
| At total depth Same as above. | | | | | | | | | | | | | Sar | doval | | - 1 | NM | | |
| 14. Date Sp 12/11/20 | oudded 13 | | | Date T.I 2/16/201 | 3 | | | 16. Date Completed 01/17/2014 D&A Ready to Prod. | | | | | | 17. Elevations (DF, RKB, RT, GL)* 7072' GL | | | | | |
| 18. Total D | | D 687 | , O1 | | 19. Ph | g Back T.D.: | MD | C7751 | | | 20. D | epth B | ridge Plug | | MD TVD | | | | |
| 21. Type E | | her Mec | hanical Lo | _ | Submit cop | py of each) | IVD | <u>6775'</u> | | | V | Vas DS | ll cored? T run? nal Survey | Z N | | Yes (Subn Yes (Subn Yes (Subn | ut repo | rt) | |
| 23. Casing | and Liner I | Record | (Report o | ill strings | set in wel | 7) | 1 | Stage Ce | | No | of Clea | 0. | Sl | Val | | | T | | |
| Hole Size | Size/Gr | ade | Wt. (#/ft. |) Top | (MD) | Bottom (MI | D) ' | Dep | | | of Sks. & Slurry of Cement (BE | | | Cement Top | | | Amount Pull | ed | |
| 12-1/4" | 9-5/8" J | | 36 | 0 | | 503' | - | /A | | 254 sk | ks | | 63 bbls | | surfac | e | 15 b | bls | |
| 7-7/8" | 5-1/2" P | -110 | 17 | 0 | | 6858' | 48 | 805' | | 1710 s | sks | | 582 bbl | s | 2400 | | 10 b | bls | |
| | | | | | | | | | | | • | | | | | | ONS | 94'14 5.DTV. | |
| | <u></u> | | | | | | | | | | | | | | | Hann. | IST | . 3 | |
| 24. Tubing Size | | Set (MI | D) Pac | ker Depth | (MD) | Size | l D | epth Set | (MD) | Packer I | Denth (| MD) | Siz | e l | Dent | h Set (MD) | Т | Packer Depth | (MD) |
| 2-7/8" | | | 7 | | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | <u> </u> | . (| | (| | | | | 2-1-2 | | | <u>, </u> |
| 25. Produci | | | | | | | 26. | | foration I | | | | n: | .,, | 7 1 | | | | |
| A) Gallup- | Formatio Dakota | <u>n</u> | | Top Botto 4711' 6870' | | | Perforated Interval 5258'-6732' | | | | Size 0.38" 1 | | | No. Holes open | | Pen | f. Status | | |
| B) | Danota | | | **** | | 0010 | 132 | .50-07 | <u> </u> | | | 0.50 | | 132 | | open | | | |
| C) | | | | | | | | | | | | | | | | | | | |
| D) | | - | | | | | | | | | | | | | | | | • | |
| 27. Acid, F | | | Cement S | Squeeze, e | tc. | | | | | | | | | | | | | | |
| | Depth Inter | val | | | hhla af | 450/ 1101 - 00 | 20551 | - Cliala | | mount a | | | | 04 5604 | 4 40/70 | Ottowa | and C | 6mmoof N | |
| 6540'-673 6236'-637 | | | | | | 15% HCL; 23 | | | | | | | | | | | aiiu,z | | |
| 5610'-577 | | | | | | 15% HCL; 13 | | | | | | | | | | | Sand. | 2.6mmscf N | 12 |
| 5258'-554 | | | | | | 15% HCL: 53 | | ····· | | | | | | | | | | | |
| 28. Product | | ıł A | | | | | | | | | | | • | | | | | | _ |
| Date First Produced | Test Date | Hours Tested | Test | | il BL | | Water BBL | | Oil Grav Corr. AF | | Gas | vity | Prod | uction M | ethod | | | ., | |
| roducca | | resieu | | | | | 0 | | 011.71 | • | J | | Fiov | vtest wi | ll be re | ported on | 1st D | elivery. | |
| Choke | Tbg. Press. | Csa | 24 H | | il | O Gas | Water | | Gas/Oil | | Wel | II Stati | L | | | | | | |
| Size | | Press. | 24 Hr. s. Rate | | BL | i | BBL | | Ratio | | | Well Status | | | | | | | |
| | SI | 0 | | ▶ |) | 0 | 0 | | | | | | | | | AA | | NEM | |
| 28a. Produc | tion - Interv | | l | | | | 1 - | | <u> </u> | | | | | | | No Hills | 医飞口 | | CAL |
| Date First Produced | | Hours Tested | Test Prod | | il BL | | Water BBL | | Oil Grav Corr. AP | | | Gas Producti Gravity | | action M | ethod | A A B | AFI F | Den | 161 |
| | Tbg. Press. Flwg. SI | Csg. Press. | 24 H Rate | | il BL | I | Water BBL | | Gas/Oil Ratio | • | Wel | II Statu | IS | ٠ | | | • | | |
| | | | _ | | | i l | ı | | I | | - 1 | | | Λ(| CFPT | TD FOR | DEC | UBU | |

^{*(}See instructions and spaces for additional data on page 2)

| 28b. Proc | luction - Inte | arvol C | | - · | | | | | | | | | | | |
|--|----------------------------|-----------------|-------------------------------|-------------|---------------|--|--------------------------|--------------------|--------------------------------------|--------------------------|--|--|--|--|--|
| Date First Test Date Hours Test Oil Gas W | | | | | | Water | Oil Gravity | Gas | Production Method | Production Method | | | | | |
| Produced . | | Tested | Production | BBL | MCF | BBL | Corr. API | Gravity | | | | | | | |
| Choke | Tbg. Press. | | 24 Hr. | Oil | Gas | Water | Gas/Oil | Well Statu | S | | | | | | |
| Size | Flwg. SI | Press. | Rate | BBL | MCF | BBL | Ratio | iu | | | | | | | |
| | uction - Inte Test Date | rval D Hours | Test | 63 | lo. | har | 616 | la . | | | | | | | |
| Produced | l'est Date | Tested | Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method | | | | | | |
| Choke | Tbg. Press. | | 24 Hr. | Oil | Gas | Water | Gas/Oil | Well Statu | 3 | | | | | | |
| Size | Flwg. SI | Press. | Rate | BBL | MCF | BBL | Ratio | | | | | | | | |
| 29. Dispo | sition of Gas | s (Solid, us | sed for fuel, ve | nted, etc.) | | | | | | | | | | | |
| 30. Sumn | nary of Poro | us Zones | (Include Aqui | fers): | | | | <u></u> | | | | | | | |
| | ng depth int | | | | | ntervals and all on the same and shut-in programs of the same and shut-in programs of the same and sam | | | | | | | | | |
| Forr | nation | Тор | Bottom | | Desc | riptions, Conten | ts etc | | Name | Тор | | | | | |
| | | 100 | Bottom | <u>.</u> | | riptions, conten | | | - Truine | Meas. Depth | | | | | |
| Nacimiento Ojo Alamo | | 830 2030 | | | | | | | | | | | | | |
| Kirtland Fruitland | | 2179 | | | | | | | | | | | | | |
| Pictured Cliffs Lewis | | 2410 2500 | | | | | | | | | | | | | |
| Cliff House Point Looks | ut | 3900 4518 | | | | | | | | | | | | | |
| Mancos Gallup | | 4711 5342 | : | | | | | | | | | | | | |
| Greenhorn Graneros | | 6535 6597 | | | | | | | | | | | | | |
| Dakota | | 6629 | | | | | | | | | | | | | |
| | | | plugging proc OH log & 680 | | BL. | | | | | | | | | | |
| PA X | ttes n | IAP E | :dnesse | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 33 Indica | e which iten | ns have be | en attached by | nlacino : | check in the | appropriate boxe | es: | | | <u> </u> | | | | | |
| | | | | | | | | | — — — — — — — — — — | | | | | | |
| ☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☐ Directional Survey ☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other: | | | | | | | | | | | | | | | |
| | | | | | nation is com | | | | records (see attached instructions)* | | | | | | |
| Na | me (please) | prini) Tai | mra Session | ıs | | | Title Operatio | | | | | | | | |
| Si | gnature | 70m | Sem | <u>;</u> ~ | | | Date 02/03/20 | 14 | | | | | | | |
| | | | | | | a crime for any tter within its jur | | y and willfully to | o make to any department or agency | of the United States any | | | | | |

(Continued on page 3) (Form 3160-4, page 2)