P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV

NEW MEXICO

Energy Minerals and Natural Resources Department
Oil Conservation Divisi
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-
Originated 11

Submit Or
Plus 2 C
to appro
District C

H-0499

## APPLICATION FOR QUALIFICATION OF WELL WORKOVER PROJECT AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

I. Operator: MURCHISON OIL & GAS, INC. OGRID #: 15363

Address: 1445 Ross Ave., Ste. 5300, LB 152

Contact Party: Micheal S. Daugherty Phone: (214)953-0263

II. Name of Well: Jackson Unit No. 1 API #: 3002527223
Location of Well: Unit Letter G, 1980 Feet from the North line and 1980 feet from the East line,
Section 22, Township 24S, Range 33E, NMPM, Lea County

III. Date Workover Procedures Commenced: 08/05/97
Date Workover Procedures were Completed: 08/18/97

IV. Attach a description of the Workover Procedures undertaken to increase the projection from the Well.

V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.

VI. Pool(s) on which Production Projection is based:

Johnson Ranch (Wolfcamp)

VII. AFFIDAVIT:

State of Texas )
) ss.
County of Midland )

Lee Roark, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.

2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.

3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

Mike Roark
(Name)

Engineer Tech
(Title)

Enron Oil & Gas Company
(Company)

SUBSCRIBED AND SWORN T efore me this 30th day of September, 19

PEGGY C. LAVINE
Notary Public, State of Texas
My Commission Expires 11-21-98

Peggy C. Lavine

Notary Public

My Commission expires: _____

---

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of 8-18, 1997

District Supervisor, District 1
Oil Conservation Division

Date: 11/3/98

IX. DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

DATE: _____

AUG 14 1998

JACKSON UNIT NO. 1
1,980' FNL & 1,980' FEI
Sec 21-24S-33E
LEA Co., NM
Spud Date:

Murchison
DEV W/O: 5,250' WOLFCAMP
Johnson Ranch Field
EOG%: 25.0000% WI 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

08/05/97 Add perforations 13,350' to 13,576' (overall) to existing Upper Wolfcamp interval.

Present operations: Circ hole with 10# brine pkr fluid and POOH with tbg and pkr.

Moved rig to location from Jackson #5 and test all dead men. RUPU, and held safety meeting to explain workover operation. RU Pro Well Test and ran under size paraffin knife on slick line to 2,000', slight amount of paraffin recovered. RU kill truck and pumped 150 gals xylene down tbg. Ran back in hole with full size knife and went to 2,000' small amount of paraffin flowed well back tbg appeared to be clean. RU kill truck and pumped 2% KCL wtr down tbg and caught pressure with 46 bbls pumped. Continued to pump at 600 psi and displaced tbg with 80 bbls. Let pressure fall off on tbg and tbg was on slight vacuum. No pressure was on csg, but one csg valve was froze and we were unable to operate. (Will replace valve). ND 10,000 psi tree, and NU 5,000' HYD BOP, tree wil be shopped to Cameron. Load csg w/130 bbls 2% KCL, picked up on tbg and opened bypass on pkr slight blow on tbg. Released RTTS pkr and POOH and LD 1 jt 2-7/8" tbg and subs, stood back 17 stands of tbg. Pkr drug 10 to 15 points until last 2 stands and out of liner top. Shut well in and SDFN. DWC $5,585. CWC $5,585.

08/06/97 Present operations: Check and insure well is dead, pump brine as needed and POOH with tbg and pkr. 12 hrs SITP 200 psi. SICP slight blow. Set two frac tanks and filled one with 440 bbls 10# brine pkr fluid. Laid return line off chk on tbg and hooked up kill truck to csg. Opened tbg and started circulating down csg @ 3 BPM broke circ with 60 bbls pumped. Circ vol 546 bbls, with 420 bbls circulated lost pressure with gas bubble at surface, chk tbg to 700 psi and continued to circ on chk with total vol of 640 bbls of 10# brine. Tbg pressure fell to 100 psi and brine was returning to surface and 510 bbls was circulated to surface. Formation took 130 bbls, shut down and opened to chk for flow. Csg was dead, and tbg had gas venting. Connected to tbg and pumped 70 bbls down tbg, with no returns up csg. Shut down and tbg was on vacuum and csg was dead. SWI and SDFN. DWC $4,848. CWC $10,433.

1,980' FNL & 1,980' FEL
Sec 21-24S-33E
LEA Co., NM
Spud Date:

DEV W/O: 15,250' WOLFCAMP
Johnson Ranch Field
EOG%: 25.0000% I 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

08/07/97 Present operations: Chk and insure well is dead, pump brine as needed, test in hole with tbg and pkr to 8,000' above slips, flange up tree. 12 hrs SITP 0 psi. SICP 0 psi. RU kill truck on csg, POOH and LD 36 jts 2-7/8" N80 tbg. GIH with 17 stands tbg. 2-7/8" tbg and set matting board. POOH with 274 stands of 2-7/8 N80 EUE 8rd AB MOD tbg, XO 2-7/8" to 2-3/8", 37 jts 2-3/8" N80 EUE 8rd AB MOD tbg, and 5" RTTS pkr with 1 tbg sub vent assembly 1 jt tbg and tbg release. Pumped 35 bbls of 10# brine in hole while pulling pipe to keep well dead, no sign of gas was seen while pulling pipe. Pkr had buildup and some of the btm jts 2-3/8" tbg indicated some scale build up and signs of corrosion. SWI and SDFN. DWC $2,254. CWC $12,687.

08/08/97 Present operations: Chk and insure well is dead, pump brine as needed. POOH with tbg and pkr, trip back in hole with 5" pkr. 12 hrs SITP 0 psi, SICP 0 psi. RU kill truck on csg, RU Bo Monk to test tbg in hole to 8,000 psi above slips. GIH with 34 jts 2-7/8" tbg, 7-5/8" Guiberson UNI VI pkr and 392 jts 2-7/8" N-80 EUE 8rd AB Mod tbg. Top 41 jts tbg are P-110 with L-80 AB Mod collars. Attempted to set pkr at 12,126' pkr would not set. POOH with 16 jts and set pkr OK. Released pkr and left swinging. Pkr will not set in csg above liner top. Will pull 7-5/8" pkr and run 5" pkr instead. All pipe was tested to 8,000 psi above slips and no failures were found in pipe. SWI and SDFN. DWC $7,988. CWC $20,675.

08/09/97 SD for Sunday. 12 hrs SITP 0 psi, SICP 0 psi. RU kill truck on csg. TOOH with 2-7/8" tbg, 2-7/8" x 7-5/8" pkr and laid down tail pipe. RU Bo Monk pipe testers and test in hole with 1.81 F nipple, 2 jts 2-3/8" EUE 8rd N80 AB Mod tbg, Guiberson UN VI 2-3/8" x 5" pkr with 1.87 F nipple XL on/off tool, 33 jts 2-3/8" EUE 8rd N-80 AB Mod tbg, 2-3/8" x 2-7/8" XO. RD pipe testers. All 2-3/8" and 2-7/8" tbg has been tested with no failures. Finished going in hole with 351 jts 2-7/8" EUE 8rd N80 AB Mod tbg and 39 jts 2-7/8" EUE 8rd P-110 AB mod tbg with L80 collars. Set pkr at 13,127' with 13 points compression, 1.87 F nipple at 13,118', 1.81 F nipple at 13,192'. Tested pkr and csg to 1500 psi, OK. ND BOP and NU WH. SWI an SDFN. DWC $21,102. CWC $41,777.

08/10/97 Spot Schlumberger grease equipment for perforating job on 8/12/97. Shut down for Sunday. CWC $41,777.

08/11/97 SITP 0, SICP 0. Spot Schlumberger grease equipment and set up for perforating. DWC $935. CWC $42,712.

Sec 21-24S-33E
LEA Co., NM
Spud Date:

Johnson Ranch Field
EOG%: 25.0000% 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

08/12/97 SITP slight blow. SICP 0. RU Schlumberger go in hole with strip guns to perforate. Unable to get clear correlation for depth correction. POOH with strip guns and ran in hole with gamma ray collar locator. Corrected on epth to pen hole log and gamma ray collar strip from 13,570' to 13,070'. POOH with tools. GIH with 1-11/16" strip guns corrected on depth and perforated 13,571' to 576', 5'-10 holes, 13,566' to 569', 3'-6 holes. Corrected on depth and perforated 13,544' to 540', 4'08 holes, 13,534' to 526', 8'-16 holes. There was no repsonse from well, POOH and all shots fired. GIH with 1-11/16" strip guns corrected on depth and depth and perforated 13,521' to 516', 5'-10 holes, corrected on depth and perforated 13,507' to 503', 4' - 8 holes, 13,497' to 495' 2'-4 holes, 13,492' to 490' 2' - 4 holes. There was no response from well, POOH and all shots fired. SWI and SDFN. DWC $2,073. CWC $44,785.

08/13/97 SITP slight blow. SICP 0. RU Schlumberger go in hole with 1-11/16" strip guns to perforate. Corrected on depth and perforated 13,470' to 468', 2'-4 holes, 13,461' to 458', 3'-6 holes. Corrected on depth and perforated 13,454' to 450', 4' - 8 holes, 13,444' to 441', 3' - 6 holes. There was no response from well POOH and all shots fired. GIH with 1-11/16" strip guns, corrected on depth and perforated 13,420' to 418', 2'-4 holes, 13,412' to 410', 2'-4 holes. Corrected on depth and perforated 13,361' to 356', 5'-10 holes 13,350' to 13,352', 2'-4 holes. There was o repsonse from well, POOH and all shots fired. Total of 46 holes shot on 8/13/97. Total of 66 holes shot on 8/12/97. Total of 36 holes shot on 4/26/85. Total of 148 holes open to wellbore. RU swab and made a total of 16 swab runs initial fluid level 4,800' with no flow of gas final fluid level 4,800' with scattered fluid to 8,500' and strong flow of gas estimated flow 150 MCF. Recovered total 66 bbls, 58 bbls water and 8 bbls oil. Estimated fluid left to recover 107 bbls. SWI and SDFN. DWC $21,702. CWC $66,487.

08/14/97 13 hrs SITP 850, SICP 150. Opened well on 12/64" chk and flow to frac tank, 1.5 hr flow 125 psi, opened to full chk and flowed well down. No fluid was recovered in flow back and strong blow with well wide open. Removed cross over, manumatic, chk, and upper master valve. Replace upper master and sent the other to shot as it would not hold pressure. Installed remaining tree, and RU swab. Initial fluid level 4,800' with scattered fluid, made a total of 13 swab runs. Final fluid level 8,200' and pulled from 11,500', fluid was scattered each run and strong tail gas after each run. Well indicated flow rates of 200+ MCF in between swab runs. Total fluid recovery 27 bbls, 21 BW and 6 BO. SWI and SDFN. DWC $12,274. CWC $79,211.

1,980' FNL & 1,980' FEL
Sec 21-24S-33E
LEA Co., NM
Spud Date:

DEV W/O: 15,250' WOLFCAMP
Johnson Ranch Field
EOG%: 25.0000% 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

08/15/97 13 hrs SITP 1050, SICP 10. Opened well on 12/64" chk and flowed for 1 hr at 1000 psi no fluid flowed to surface. RU BJ Services to acid treat, held safety meeting and tested lines. Acid treated with 10,000 gals 20% gelled acid and 222 1.1 RCN ball sealer spaced out evenly in treatment. Well loaded with 55 bbls acid pumped at 5 BPM and initial break was 5130 psi to 4963 psi. Increased rate to 6 BPM with excellent ball action with several breaks, larges break was from 6120 psi to 5180 psi at 6.4 BPM. Max rate was 8 BPM and average rate was 6.8 BPM, Max treating pressure was 6440 psi and average was 6000 psi. Instant shut-in pressure was 1680 psi, 5 min 39 psi and on vacuum in 6 min. RD BJ Services and installed swab valve on tree. RU swab and made 6 swab runs and well started flowing. Flowed to frac tank on 21/64 in four hours we had recovered a total 137 bbls of load and we were cutting 50% oil. Total load to recover was 321 bbls. The well had 1300 psi, flowing tbg pressure. Continued to flow to frac tank while waiting on test unit but discontinued gauging for safety. RU Pro well test unit at midnight with well on 1200 psi on 24/64" chk, total fluid recovered in flow back to frac tank was 195 BW and 77 BP by color cut. Total load left to recover is 126 bbls. Left well flowing through test unit. DWC $30,290. CWC $109,501.

08/16/97 Flowed well through portabl test unit as follows:

| TIME | CHK | PRESS | MCFD | OIL | WATER |
|---|---|---|---|---|---|
| 0100 | 18/64 | 1500 | 2210 | | |
| 0200 | 16/64 | 1500 | 2520 | 20 | 8 |
| 0400 | 17/64 | 1350 | 2520 | 16 | 10 |
| 0600 | 18/64 | 1325 | 2520 | 17 | 11 |
| 0800 | 18/64 | 1300 | 2471 | 15 | 9 |
| 1000 | 18/67 | 1300 | 2471 | 21 | 5 |
| 1200 | 18/64 | 1275 | 2471 | 18 | 2 |
| 1330 | 18/64 | 1275 | 2471 | 10 | 3 |
| Total | | | | 117 | 48 |

Shut well in at 1330 and connected to production unit. Opened well at 1630 at 1900 psi and started flow through MOGI production equipment. higland changed out plate on meter run to 1.5 orifice. Left location at 1900 with well flowig at 1625 psi and 2391 MCF. Load left to recover 78 bbls. NOTE: at 10:00 a.m., 8/18/97 well was making 1.8 MMCFD with FTP 1280 psi. Well made 104 bbls and 57 bbls water in last 24 hrs. DWC $5,000. CWC $114,501.

08/18/97 FTP 1280, MCFD 1800, BC 104, BW 21. CWC $114,501.

08/19/97 24 hrs flow 1180 FTP, 1840 MCFD, 102 BC, 24 BW. CWC $114,501.

08/20/97 24 hrs flow, 1025 FTP, 1748 MCF, 97 BC, 9 BW. CWC $114,501.

1,980' FNL & 1,980' FEL
Sec 21-24S-33E
LEA Co., NM
Spud Date:

DEV W/O: 15,250' WOLFCAMP
Johnson Ranch Field
EOG%: 25.0000% : 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

| | | |
|---|---|---|
| 08/21/97 | | 24 hrs FTP 1025, 1748 MCFD, 97 BC, 9 BW. CWC $114,501. |
| 08/22/97 | | 24 hrs 975 FTP, 1748 MCFD, 82 BC, 9 BW. CWC $114,501. |
| 08/23/97 | | 24 hrs 950 FTP, 1535 MCFD, 84 BC, 6 BW. CWC $114,501. |
| 08/24/97 | | 24 hrs flow, 940 FTP, 1506 MCFD, 80 BC, 3 BW. CWC $114,501. |
| 08/25/97 | | 24 hrs 900 FTP, 1472 MCFD, 82 BC, 3 BW. CWC $114,501. |
| 08/26/97 | | 24 hrs flow, 900 FTP, 1439 MCFD, 70 BC, 3 BW. CWC $114,501. |
| 08/27/97 | | 24 hrs 840 FTP, 1484 MCFD, 78 BC, 3 BW. CWC $114,501. |
| 09/04/97 | 8/28/97 | 24 hrs FTP 860, 1274 MCFD, 32 BC 0 BW. |
| | 8/29 | 24 hrs 850 FTP, 1455 MCFD, 2 BC, 0 BW. |
| | 8/30 | 24 hrs 850 FTP, 1288 MCFD, 48 BC, 0 BW |
| | 8/31 | 24 hrs 800 FTP, 1380 MCFD, 63 BC, 0 BW. |
| | 9/1 | 24 hrs 800 FTP, 1334 MCFD, 38 BC, 0 BW. |
| | 9/2 | 24 hrs 825 FTP, 1210 MCFD, 48 BC, 0 BW |
| | 9/3 | 24 hrs 825 FTP, 1223 MCFD, 48 BC, 0 BW. |
| | 9/4 | 24 hrs 840 FTP, 1163 MCFD, 45 BC, 0 BW CWC $114,501. |
| 09/05/97 | | 24 hrs flow 840 FTP, 1163 MCFD, 48 BC, 0 BW. CWC $114,501. |
| 09/06/97 | | 24 hrs flow 850 FTP, 1202 MCFD, 43 BC, 0 BW. CWC $114,501. |
| 09/07/97 | | 24 hrs flow, 850 FTP, 1154 MCFD, 43 BC, 0 BW. CWC $114,501. |
| 09/08/97 | | 24 hrs flow, 850 FTP, 1154 MCFD, 38 BC, 0 BW. CWC $114,501. |
| 09/09/97 | | 24 hrs flow, 840 MCF, 1154 MCFD, 40 BC, 0 BW. CWC $114,501. |
| 09/10/97 | | 24 hrs flow, 800 FTP, 1214 MCFD, 47 BC, 0 BW. CWC $114,501. |
| 09/11/97 | | 24 hrs flow, 790 FTP, 1137 MCFD, 45 BC, 0 BW. CWC $114,501. |
| 09/12/97 | | 24 hrs flow, 760 MCF, 1073 csg, 1124 MCFD, 45 BC, 0 BW. CWC $114,501. |

Sec 21-24S-33E
LEA Co., NM
Spud Date:

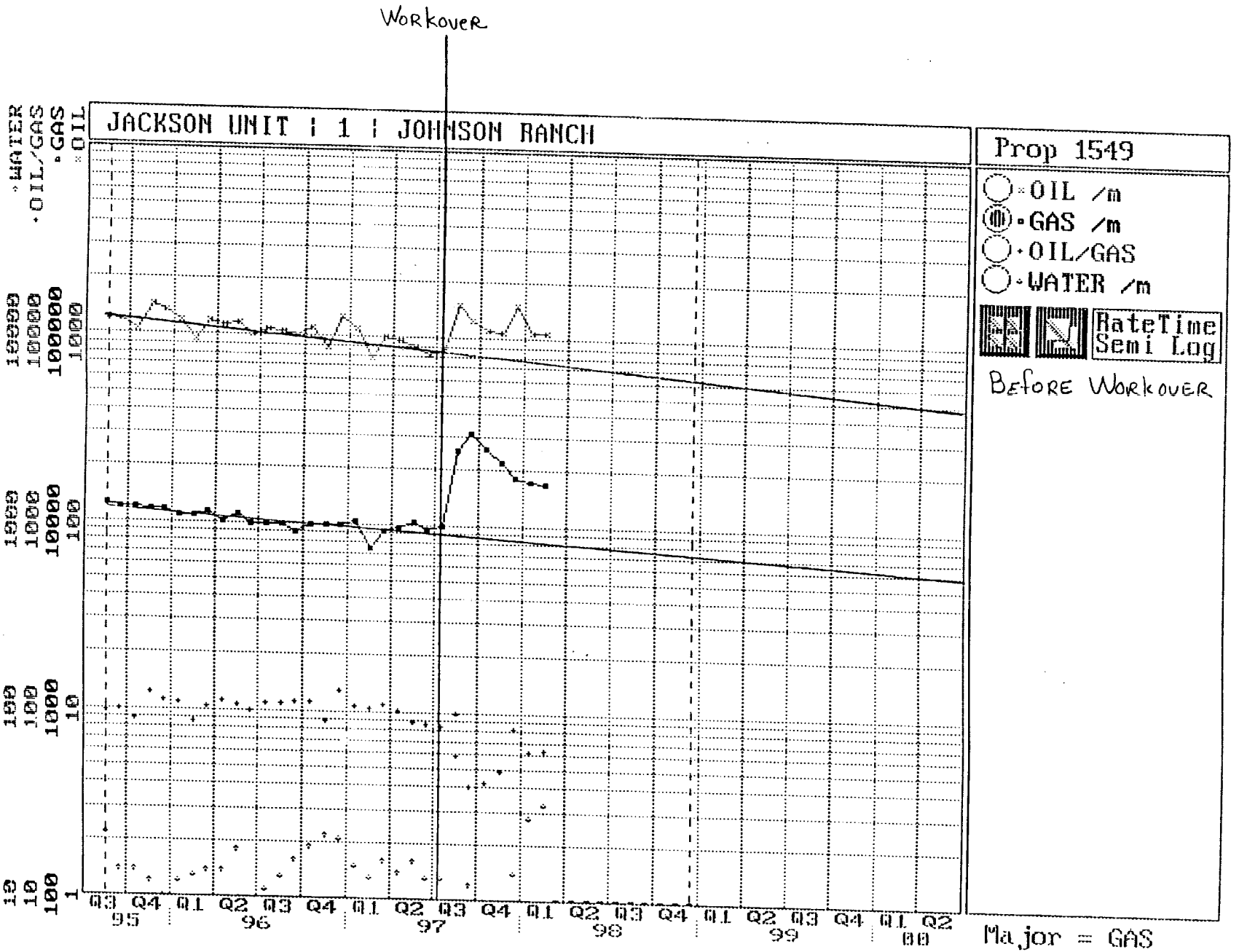
W.O. 15,250' WOLFCAMP
Johnson Ranch Field
EOG%: 25.0000% : 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

| | | |
|---|---|---|
| 09/13/97 | | 24 hrs flow, 800 FTP, 175 csg, 1070 MCFD, 33 BC, 0 BW. CWC $114,501. |
| 09/14/97 | | 24 hrs flow, 800 fTP, 180 csg, 1024 MCFD, 47 BC, 0 BW. CWC $114,501. |
| 09/15/97 | | 24 hrs 800 FTP, 190 CP, 1058 MCFD, 43 BC, 0 BW. CWC $114,501. |
| 09/16/97 | | 24 hrs flow, 775 FTP, 1058 MCFD, 32 BC, 0 BW. CWC $114,501. |
| 09/17/97 | | 24 hrs flow, 750 FTP, 1091 MCFD, 47 BC, 3 BW. CWC $114,501. |
| 09/18/97 | | 24 hrs flow, 750 FTP, 1058 MCF, 47 BC, 3 BW. CWC $114,501. |
| 09/19/97 | | 24 hrs flow, 775 FTP, 1,058 MCF, 47 BC, 0 BW. CWC $114,501. |
| 09/24/97 | 9/20 | 24 hrs flow, 775 FTP, 1196 MCFD, 40 BC, 3 BW. |
| | 9/21 | 24 hrs flow, 775 FTP, 955 MCFD, 45 BC, 0 BW. |
| | 9/22 | 24 hrs flow, 775 FTP, 910 MCFD, 41 BC, 0 BW. |
| | 9/23 | 24 hrs flow, 775 FTP, 910 MCFD, 40 BC, 0 BW. |
| | 9/24 | 24 hrs flow, 75 FTP, 910 MCFD, 40 BC, 0 BW. CWC $114,501. |
| 09/29/97 | 9/25 | 775 FTP, 910 MCFD, 47 BC, 0 BW. |
| | 9/26 | 775 FTP, 977 MCFD, 40 BC, 0 BW. |
| | 9/27 | 780 FTP, 952 MCFD, 35 BC, 0 BW. |
| | 9/28 | 780 FTP, 970 MCFD, 38 BC, 0 BW. |
| | 9/29 | 775 FTP, 942 MCFD, 38 BC, 0 BWCWC $114,501. |
| 09/30/97 | | 775 FTP, 977 MCFD, 37 BC, 0 BW. CWC $114,501. |
| 10/01/97 | | 780 FTP, 988 MCF, 40 BO, 0 BW. CWC $114,501. |
| 10/02/97 | | 900 FTP, 988 MCF, 40 BC, 0 BW. CWC $114,501. |
| 10/03/97 | | 800 FTP, 891 MCF, 37 BC, 0 BW. CWC $114,501. |
| 10/04/97 | | 800 FTP, 891 MCF, 37 BC, 0 BW. CWC $114,501. |
| 10/05/97 | | 800 FTP, 916 MCF, 32 BC, 0 BW. CWC $114,501. |

1,980' FNL & 1,980' FEL
Sec 21-24S-33E
LEA Co., NM
Spud Date:

DEV W/O: 15,250' WOLFCAMP
Johnson Ranch Field
EOG%: 25.0000% 21.8750% NRI
AFE No.: 10-1371
DHC: 0; CWC: 72,600
Workover-expensed

| | | |
|---|---|---|
| 10/06/97 | | 800 FTP, 916 MCFD, 33 BC, 0 BW. CWC $114,501. |
| 10/07/97 | | 800 FTP, 916 MCF, 33 BC, 0 BW. CWC $114,501. |
| 10/08/97 | | 850 FTP, 827 MCFD, 41 BC, 0 BW. CWC $114,501. |
| 10/13/97 | 10/7 | 800 FTP, 916 MCFD, 33 BC, 0 BW |
| | 10/8 | 850 FTP, 827 MCFD, 41 BC, 0 BW. |
| | 10/9 | 860 FTP, 827 MCFD, 33 BC, 0 BW. |
| | 10/10 | 865 FTP, 799 MCFD, 25 BC, 0 BW. |
| | 10/11 | 865 FTP, 836 MCFD, 20 BC, 0 BW. |
| | 10/12 | 865 FTP, 827 MCFD, 32 BC, 0 BW. |
| | 10/13 | 790 FTP, 934 MCFD, 32 BC, 0 BW. CWC $114,501. |
| 10/15/97 | 10/9 | 860 FTP, 827 MCFD, 33 BC, 0 BW. CWC $114,501. |
| | 10/10 | 865 FTP, 799 MCFD, 25 BC, 0 BW |
| | 10/11 | 865 FTP, 836 MCFD, 20 BC, 0 BW |
| | 10/12 | 865 FTP, 827 MCFD, 32 BC, 0 BW |
| | 10/13 | 790 FTP, 934 MCFD, 32 BC, 0 BW |
| | 10/14 | 825 FTP, 827 MCFD, 35 BC, 0 BW |
| 10/20/97 | 10/15 | 790 FTP, 916 MCFD, 35 BC, 0 BW. |
| | 10/16 | 790 FTP, 845 MCFD, 67 BC, 0 BW. |
| | 10/17 | 775 FTP, 853 MCFD, 53 BC, 0 BW. |
| | 10/18 | 790 FTP, 916 MCFD, 28 BC, 0 BW. |
| | 10/19 | 825 FTP, 827 MCFD, 28 BC, 0 BW. |
| | 10/20 | 825 FTP, 827 MCFD, 30 BC, 0 BWCWC $114,501. |


Workover
JACKSON UNIT | 1 | JOHNSON RANCH
WATER
OIL/GAS
GAS
OIL
100000
10000
1000
100
10
1
Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2
95 96 97 98 99 00
Prop 1549
OIL /m
GAS /m
OIL/GAS
WATER /m
RateTime
Semi Log
Before Workover
Major = GAS

Jackson Unit No. 1

Future Production Before Workov--

| | IP Rate at WO on 8/9 | Decline(exp) |
|---|---|---|
| Oil | 850 BOPM | 14 %/yr |
| Gas | 9900 mcf/mo | 17 %/yr |

| Date | Oil BOPM | Gas MCF/Mo |
|---|---|---|
| 9/15/98 | 850.0 | 9900.0 |
| 10/15/98 | 840.1 | 9760.7 |
| 11/15/98 | 830.4 | 9623.4 |
| 12/15/98 | 820.8 | 9488.1 |
| 1/15/99 | 811.2 | 9354.6 |
| 2/15/99 | 801.8 | 9223.0 |
| 3/15/99 | 792.5 | 9093.3 |
| 4/15/99 | 783.3 | 8965.4 |
| 5/15/99 | 774.3 | 8839.2 |
| 6/15/99 | 765.3 | 8714.9 |
| 7/15/99 | 756.4 | 8592.3 |
| 8/15/99 | 747.6 | 8471.4 |
| 9/15/99 | 739.0 | 8352.3 |
| 10/15/99 | 730.4 | 8234.8 |
| 11/15/99 | 721.9 | 8119.0 |
| 12/15/99 | 713.5 | 8004.7 |
| 1/15/00 | 705.3 | 7892.1 |
| 2/15/00 | 697.1 | 7781.1 |
| 3/15/00 | 689.0 | 7671.7 |
| 4/15/00 | 681.0 | 7563.8 |
| 5/15/00 | 673.1 | 7457.4 |
| 6/15/00 | 665.3 | 7352.5 |
| 7/15/00 | 657.6 | 7249.0 |
| 8/15/00 | 650.0 | 7147.1 |
| 9/15/00 | 642.4 | 7046.5 |
| 10/15/00 | 635.0 | 6947.4 |
| 11/15/00 | 627.6 | 6849.7 |
| 12/15/00 | 620.3 | 6753.3 |
| 1/15/01 | 613.1 | 6658.3 |
| 2/15/01 | 606.0 | 6564.7 |
| 3/15/01 | 599.0 | 6472.3 |
| 4/15/01 | 592.0 | 6381.3 |
| 5/15/01 | 585.2 | 6291.5 |
| 6/15/01 | 578.4 | 6203.0 |
| 7/15/01 | 571.7 | 6115.8 |
| 8/15/01 | 565.0 | 6029.7 |
| 9/15/01 | 558.5 | 5944.9 |
| 10/15/01 | 552.0 | 5861.3 |
| 11/15/01 | 545.6 | 5778.8 |
| 12/15/01 | 539.3 | 5697.5 |
| 1/15/02 | 533.0 | 5617.4 |
| 2/15/02 | 526.8 | 5538.4 |
| 3/15/02 | 520.7 | 5460.5 |
| 4/15/02 | 514.7 | 5383.7 |
| 5/15/02 | 508.7 | 5307.9 |
| 6/15/02 | 502.8 | 5233.3 |
| 7/15/02 | 497.0 | 5159.6 |
| 8/15/02 | 491.2 | 5087.1 |
| 9/15/02 | 485.5 | 5015.5 |

| Date | Oil BOPM | Gas MCF/Mo |
|---|---|---|
| 10/15/02 | 479.9 | 4945.0 |
| 11/15/02 | 474.3 | 4875.4 |
| 12/15/02 | 468.8 | 4806.8 |
| 1/15/03 | 463.4 | 4739.2 |
| 2/15/03 | 458.0 | 4672.5 |
| 3/15/03 | 452.7 | 4606.8 |
| 4/15/03 | 447.5 | 4542.0 |
| 5/15/03 | 442.3 | 4478.1 |
| 6/15/03 | 437.1 | 4415.1 |
| 7/15/03 | 432.1 | 4353.0 |
| 8/15/03 | 427.1 | 4291.8 |
| 9/15/03 | 422.1 | 4231.4 |
| 10/15/03 | 417.2 | 4171.9 |
| 11/15/03 | 412.4 | 4113.2 |
| 12/15/03 | 407.6 | 4055.3 |
| 1/15/04 | 402.9 | 3998.3 |
| 2/15/04 | 398.2 | 3942.1 |
| 3/15/04 | 393.6 | 3886.6 |
| 4/15/04 | 389.0 | 3831.9 |
| 5/15/04 | 384.5 | 3778.0 |
| 6/15/04 | 380.0 | 3724.9 |
| 7/15/04 | 375.6 | 3672.5 |
| 8/15/04 | 371.3 | 3620.8 |
| 9/15/04 | 367.0 | 3569.9 |
| 10/15/04 | 362.7 | 3519.7 |
| 11/15/04 | 358.5 | 3470.2 |
| 12/15/04 | 354.3 | 3421.3 |
| 1/15/05 | 350.2 | 3373.2 |
| 2/15/05 | 346.2 | 3325.8 |
| 3/15/05 | 342.1 | 3279.0 |
| 4/15/05 | 338.2 | 3232.9 |
| 5/15/05 | 334.3 | 3187.4 |
| 6/15/05 | 330.4 | 3142.6 |
| 7/15/05 | 326.5 | 3098.3 |
| 8/15/05 | 322.8 | 3054.8 |
| 9/15/05 | 319.0 | 3011.8 |
| 10/15/05 | 315.3 | 2969.4 |
| 11/15/05 | 311.7 | 2927.7 |
| 12/15/05 | 308.0 | 2886.5 |
| 1/15/06 | 304.5 | 2845.9 |
| 2/15/06 | 300.9 | 2805.8 |
| 3/15/06 | 297.4 | 2766.4 |
| 4/15/06 | 294.0 | 2727.5 |
| 5/15/06 | 290.6 | 2689.1 |
| 6/15/06 | 287.2 | 2651.3 |
| 7/15/06 | 283.9 | 2614.0 |
| 8/15/06 | 280.6 | 2577.2 |
| 9/15/06 | 277.3 | 2540.9 |
| 10/15/06 | 274.1 | 2505.2 |

| Date | Oil BOPM | Gas MCF/Mo |
|---|---|---|
| 11/15/06 | 270.9 | 2470.0 |
| 12/15/06 | 267.8 | 2435.2 |
| 1/15/07 | 264.7 | 2401.0 |
| 2/15/07 | 261.6 | 2367.2 |
| 3/15/07 | 258.6 | 2333.9 |
| 4/15/07 | 255.6 | 2301.1 |
| 5/15/07 | 252.6 | 2268.7 |
| 6/15/07 | 249.7 | 2236.8 |
| 7/15/07 | 246.8 | 2205.3 |
| 8/15/07 | 243.9 | 2174.3 |
| 9/15/07 | 241.1 | 2143.7 |
| 10/15/07 | 238.3 | 2113.5 |
| 11/15/07 | 235.5 | 2083.8 |
| 12/15/07 | 232.8 | 2054.5 |
| 1/15/08 | 230.1 | 2025.6 |
| 2/15/08 | 227.4 | 1997.1 |
| 3/15/08 | 224.8 | 1969.0 |
| 4/15/08 | 222.2 | 1941.3 |
| 5/15/08 | 219.6 | 1914.0 |
| 6/15/08 | 217.1 | 1887.1 |
| 7/15/08 | 214.6 | 1860.5 |
| 8/15/08 | 212.1 | 1834.4 |
| 9/15/08 | 209.6 | 1808.6 |
| 10/15/08 | 207.2 | 1783.1 |
| 11/15/08 | 204.8 | 1758.0 |
| 12/15/08 | 202.4 | 1733.3 |
| 1/15/09 | 200.1 | 1708.9 |
| 2/15/09 | 197.7 | 1684.9 |
| 3/15/09 | 195.4 | 1661.2 |
| 4/15/09 | 193.2 | 1637.8 |
| 5/15/09 | 190.9 | 1614.8 |
| 6/15/09 | 188.7 | 1592.1 |
| 7/15/09 | 186.5 | 1569.7 |
| 8/15/09 | 184.4 | 1547.6 |
| 9/15/09 | 182.2 | 1525.8 |
| 10/15/09 | 180.1 | 1504.4 |
| 11/15/09 | 178.0 | 1483.2 |
| 12/15/09 | 176.0 | 1462.3 |
| 1/15/10 | 173.9 | 1441.8 |
| 2/15/10 | 171.9 | 1421.5 |
| 3/15/10 | 169.9 | 1401.5 |
| 4/15/10 | 167.9 | 1381.8 |
| 5/15/10 | 166.0 | 1362.3 |
| 6/15/10 | 164.1 | 1343.2 |
| 7/15/10 | 162.2 | 1324.3 |
| 8/15/10 | 160.3 | 1305.7 |
| 9/15/10 | 158.4 | 1287.3 |
| 10/15/10 | 156.6 | 1269.2 |
| 11/15/10 | 154.8 | 1251.3 |

| Date | Oil BOPM | Gas MCF/Mo |
|---|---|---|
| 12/15/10 | 153.0 | 1233.7 |
| 1/15/11 | 151.2 | 1216.4 |
| 2/15/11 | 149.4 | 1199.3 |
| 3/15/11 | 147.7 | 1182.4 |
| 4/15/11 | 146.0 | 1165.8 |
| 5/15/11 | 144.3 | 1149.4 |
| 6/15/11 | 142.6 | 1133.2 |
| 7/15/11 | 141.0 | 1117.2 |
| 8/15/11 | 139.3 | 1101.5 |
| 9/15/11 | 137.7 | 1086.0 |
| 10/15/11 | 136.1 | 1070.8 |
| 11/15/11 | 134.5 | 1055.7 |
| 12/15/11 | 133.0 | 1040.8 |
| 1/15/12 | 131.4 | 1026.2 |
| 2/15/12 | 129.9 | 1011.8 |
| 3/15/12 | 128.4 | 997.5 |
| 4/15/12 | 126.9 | 983.5 |
| 5/15/12 | 125.4 | 969.7 |
| 6/15/12 | 124.0 | 956.0 |
| 7/15/12 | 122.6 | 942.6 |
| 8/15/12 | 121.1 | 929.3 |
| 9/15/12 | 119.7 | 916.3 |
| 10/15/12 | 118.3 | 903.4 |
| 11/15/12 | 117.0 | 890.7 |
| 12/15/12 | 115.6 | 878.1 |
| 1/15/13 | 114.3 | 865.8 |
| 2/15/13 | 112.9 | 853.6 |
| 3/15/13 | 111.6 | 841.6 |
| 4/15/13 | 110.3 | 829.7 |
| 5/15/13 | 109.1 | 818.1 |
| 6/15/13 | 107.8 | 806.6 |
| 7/15/13 | 106.5 | 795.2 |
| 8/15/13 | 105.3 | 784.0 |
| 9/15/13 | 104.1 | 773.0 |
| 10/15/13 | 102.9 | 762.1 |
| 11/15/13 | 101.7 | 751.4 |
| 12/15/13 | 100.5 | 740.8 |
| 1/15/14 | 99.3 | 730.4 |
| 2/15/14 | 98.2 | 720.1 |
| 3/15/14 | 97.1 | 710.0 |
| 4/15/14 | 95.9 | 700.0 |
| 5/15/14 | 94.8 | 690.2 |
| 6/15/14 | 93.7 | 680.5 |
| 7/15/14 | 92.6 | 670.9 |
| 8/15/14 | 91.6 | 661.5 |
| 9/15/14 | 90.5 | 652.2 |
| 10/15/14 | 89.4 | 643.0 |
| 11/15/14 | 88.4 | 633.9 |
| 12/15/14 | 87.4 | 625.0 |
| 1/15/15 | 86.4 | 616.2 |
| 2/15/15 | 85.4 | 607.6 |
| 3/15/15 | 84.4 | 599.0 |
| 4/15/15 | 83.4 | 590.6 |
| 5/15/15 | 82.4 | 582.3 |
| 6/15/15 | 81.5 | 574.1 |
| 7/15/15 | 80.5 | 566.0 |
| 8/15/15 | 79.6 | 558.1 |
| 9/15/15 | 78.7 | 550.2 |
| 10/15/15 | 77.8 | 542.5 |
| 11/15/15 | 76.9 | 534.8 |
| 12/15/15 | 76.0 | 527.3 |
| 1/15/16 | 75.1 | 519.9 |
| 2/15/16 | 74.2 | 512.6 |
| 3/15/16 | 73.3 | 505.4 |
| 4/15/16 | 72.5 | 498.3 |
| 5/15/16 | 71.7 | 491.3 |
| 6/15/16 | 70.8 | 484.3 |
| 7/15/16 | 70.0 | 477.5 |
| 8/15/16 | 69.2 | 470.8 |
| 9/15/16 | 68.4 | 464.2 |
| 10/15/16 | 67.6 | 457.7 |
| 11/15/16 | 66.8 | 451.2 |
| 12/15/16 | 66.0 | 444.9 |
| 1/15/17 | 65.3 | 438.6 |
| 2/15/17 | 64.5 | 432.4 |
| 3/15/17 | 63.8 | 426.4 |
| 4/15/17 | 63.0 | 420.4 |
| 5/15/17 | 62.3 | 414.5 |
| 6/15/17 | 61.6 | 408.6 |
| 7/15/17 | 60.9 | 402.9 |
| 8/15/17 | 60.2 | 397.2 |
| 9/15/17 | 59.5 | 391.6 |
| 10/15/17 | 58.8 | 386.1 |
| 11/15/17 | 58.1 | 380.7 |
| 12/15/17 | 57.4 | 375.3 |
| 1/15/18 | 56.7 | 370.0 |
| 2/15/18 | 56.1 | 364.8 |
| 3/15/18 | 55.4 | 359.7 |
| 4/15/18 | 54.8 | 354.6 |
| 5/15/18 | 54.2 | 349.7 |
| 6/15/18 | 53.5 | 344.7 |
| 7/15/18 | 52.9 | 339.9 |
| 8/15/18 | 52.3 | 335.1 |
| 9/15/18 | 51.7 | 330.4 |
| 10/15/18 | 51.1 | 325.7 |
| 11/15/18 | 50.5 | 321.2 |
| 12/15/18 | 49.9 | 316.6 |
| 1/15/19 | 49.3 | 312.2 |
| 2/15/19 | 48.8 | 307.8 |
| 3/15/19 | 48.2 | 303.5 |
| 4/15/19 | 47.6 | 299.2 |
| 5/15/19 | 47.1 | 295.0 |
| 6/15/19 | 46.5 | 290.8 |
| 7/15/19 | 46.0 | 286.8 |
| 8/15/19 | 45.5 | 282.7 |
| 9/15/98 | 0 | 0 |