

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., 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 and Natural Resources

Form C-103
May 27, 2004

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

| | |
|---|--------------|
| WELL API NO. | 30-025-09638 |
| 5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> | |
| 6. State Oil & Gas Lease No. NM 12612 | |
| 7. Lease Name or Unit Agreement Name NM 70962X | |
| 8. Well Number Cooper Jal Unit 122 | |
| 9. OGRID Number 193003 | |
| 10. Pool name or Wildcat JALMAT: Tan, Y, 7-R; Langlie Mattix: 7-R, Q, GB | |

| | |
|---|--|
| SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) | |
| 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Injector <input checked="" type="checkbox"/> | |
| 2. Name of Operator SDG Resources L. P. | |
| 3. Address of Operator P. O. Box 1390 Montrose, CO 81402 | |
| 4. Well Location Unit Letter <u>A</u> <u>330</u> feet from the <u>NORTH</u> line and <u>990</u> feet from the <u>EAST</u> line Section <u>24</u> Township <u>24S</u> Range <u>36E</u> NMPM LEA County | |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,320' GL | |
| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/> | |
| Pit type <u>DIRT</u> Depth to Groundwater <u>130</u> feet Distance from nearest fresh water well <u>>1000</u> feet Distance from nearest surface water <u>>1000</u> feet | |
| Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>200</u> bbls; Construction Material <u>Synthetic</u> | |

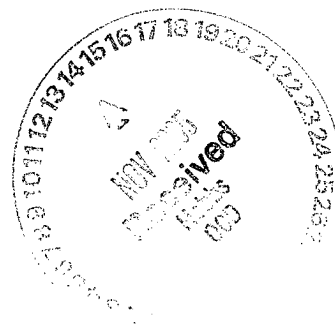
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| | | | |
|--|---|--|--|
| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | COMMENCE DRILLING OPNS. <input type="checkbox"/> | P AND A <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | MULTIPLE COMPL <input type="checkbox"/> | CASING/CEMENT JOB <input type="checkbox"/> | |
| OTHER: Perform Step-Rate Test. <input checked="" type="checkbox"/> | | OTHER: <input type="checkbox"/> | |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Objective: Perform Step-Rate Test.

1. Shut well in 24 hours prior to test.
 2. R.U. Arc Pressure Data, Inc.
 3. RIH with pressure bomb and locate at mid-perfs.
 4. Start injection at 100 bwpd for 1 hour.
 5. Ramp rates up at 100 – 200 bwpd increments per hour.
- Note: Obtain at least 3 points before parting pressure and 3 – 4 points after parting pressure.
Note: Maximum rate should be 1000 bwpd.
6. POOH with pressure bomb. R. D. Arc Pressure Data, Inc.
 7. Place well on injection at 120 bwpd.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCDC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Domingo Carvajal TITLE Senior Petroleum Engineer DATE 11/10/05

Type or print name
For State Use Only

E-mail address: Domingo@sdgresources.com Telephone No. 432-580-8500

APPROVED BY: Larry W. Wink TITLE FIELD REPRESENTATIVE II/STAFF MANAGER DATE NOV 14 2005

Conditions of Approval (if any):

WELLBORE SCHEMATIC AND HISTORY

CURRENT COMPLETION SCHEMATIC

Surface Csg

Hole Size: 11 in
Csg. Size: 8 5/8 in
Set @: 280 ft
Sxs Cmt: 150
Circ: Yes
TOC @: surf
TOC by: circ

Tie Back at
149' 5 1/2" Csg

TOC @ 600'
BY Calc.

DV Tool @ 1200'

TOC @ 2273'
by 80% Calc

By Calc.

pkc @ 2937'

Jalmat
3020'-52'

3069'-89'

3103'-20'

3133'-46'

3152'-82'

3188'-98'

3237'-45'

3297'-3307'

3324'-29'

3341'-43'

3360'-68'

3370'-72'

3376'-82'

3385'-88'

3406'-08'

3420'-21'

3430'-35'

3438'-44'

3452'-55'

3459'-61'

OH Interval

Fill at 3468'

Langlie Mattix

3406'-08'

3420'-21'

3430'-35'

3438'-44'

3452'-55'

3459'-61'

TOF @ 3515'

OH ID: 4 3/4 in

PBTD: 3552 ft

TD: 3552 ft

LEASE NAME

Cooper Jal Unit

WELL NO.

122 W

STATUS:

Active

Water Injector

API#

30-025-09638

LOCATION:

330 FNL & 990 FEL, Sec 24, T - 24S, R - 36E, Lee County, New Mexico

SPUD DATE:

TD

3552

KB

3,321'

DF

INT. COMP. DATE:

06/18/54

PBTD

3552

GL

3,311'

GEOLOGICAL DATA

ELECTRIC LOGS:

GR-CCL (12-2-93 Halliburton)

Injection Profile log (4-20-95 Houston, Inc.)

GR-N from 100 - 3553' (6-14-54 Schlumberger)

CORES, DST'S or MUD LOGS:

HYDROCARBON BEARING ZONE DEPTH TOPS:

CASING PROFILE

SURF. 8 5/8" - 32#, J-55 set@ 280' Cmt'd w/150 sxs - circ cmt to surf.

PROD. 5 1/2" - 14#, H-40 set@ 3465' Cmt'd w/200 sxs - TOC @ 2265' f/ surf by calc. DV tool @ 1200' - pmp 100 sxs. TOC @ 600' by calc.

LINER

None

CURRENT PERFORATION DATA

CSG. PERFS:

| Interval | Net feet | No. holes |
|--------------|----------|-----------|
| 3020 - 52' | 32 | 64 |
| 3069 - 89' | 20 | 40 |
| 3103 - 20' | 17 | 34 |
| 3133 - 46' | 13 | 26 |
| 3152 - 82' | 30 | 60 |
| 3188 - 98' | 10 | 20 |
| 3237 - 45' | 8 | 16 |
| 3297 - 3307' | 10 | 20 |
| | 280 | |

| Interval | Net feet | No. Holes |
|-----------|----------|-----------|
| 3324'-29' | 5 | 11 |
| 3341'-43' | 2 | 5 |
| 3360'-68' | 8 | 17 |
| 3370'-72' | 2 | 5 |
| 3376'-82' | 6 | 13 |
| 3385'-88' | 3 | 7 |
| 3406'-08' | 4 | 5 |
| 3420'-21' | 4 | 5 |
| 3430'-35' | 5 | 11 |
| 3438'-44' | 12 | 13 |
| 3452'-55' | 6 | 7 |
| 3459'-61' | 6 | 7 |

Open Hole:

3465'-3552'

Perf'd w/2 spf, 120 deg phasing, .46" dia hole

TUBING DETAIL

10/31/2003

ROD DETAIL

Length (ft)

Detail

10 KB

2927 93 jts - 2 3/8" 4.7#, CPL, J-55, 8rd EUE tbq.

3 1-5 1/2" x 2 3/8" Baker Model AD-1 packer
2940 btm

WELL HISTORY SUMMARY

18-Jun-54 Initial completion interval: 3465 - 3552' (Lower 7 Rivers OH). Frac'd w/4,000 gals oil & 6,000#s sand.

IP=254 bopd, 0 bwpd & 222 Mcf/gpd (flowing)

09-Jun-56 Placed well on rod pump

05-May-71 Converted well to injection: C/O fill rom 3535 - 3546'

10-Feb-84 C/O to 3552' (TD). Installed new IPC tbq.

29-Nov-93 C/O from 3479 - 3554'. Set pkc @ 3399' & aodx OH 3465 - 3552 w/4,200 gals 20% HCL and 168 gals TW-45 in 4-stages using 1,900#s rocksalt as diversion. PM=4,000 - 700 psi, AIR=4 bpm. Ran GR-CCL from 3300 - 2800'. Perf'd from 3020 - 3307' w/2 spf (280 - .46" holes). Set pkc @ 2890' & aodx perfs (3020 - 3307') w/ 4,200 gals 20% NEFE HCL and TW-425 dropping 300 7/8" RCN ballsealers. PM=2400 - 650 psi, AIR=4.5 bpm no good ball action, ISIP=650 psi, P2min=vacuum. RIH w/ pkc on IPC tbq and set pkc @ 2962'. Placed well on injection @ 450 bwpd (avg), TP=vacuum.

14-Feb-02 Tag TD using SL unit (1 1/4" x 5' sinker bar). Tag fill @ 3056' (496' of fill).

02-Sep-03 POOH with IPC tubing and laid down 4 1/2" AD-1 packer. Talled in hole with 2 7/8" work string and set RBP at 3000'. Test RBP to 500 psi - held. Ran GR/CBL from 2990' to 151' - top of cement at 160'. Sling shot 5 1/2" casing at 149'. Recovered 149' of casing. Ran new 5 1/2" casing, tie back at 149' onto old 5 1/2" casing. Pressure casing to 500 psi - held. Perforate casing from 3324'-3461'. Total feet 45, total holes 102. Treated perforation with 280 bbls surfactant water and 3000 gallons of 15% NEFE HCl acid via PerfClean Tool. Cleaned out with 3 1/2" bailer from 3453" to 3468". RIH with 5 1/2" AD-1 packer while hydrotesting 2 3/8" IPC tubing to 7000 psi. Set packer 2962', pressure test to 500 psi - held. Placed on injection at 300 BWPd at 0 psi.

30-Oct-03 Had pressure on annulus. Reset packer - test without success. POOH with 2 3/8" IPC tubing and 5 1/2" AD-1 packer. Redressed packer. RIH with 5 1/2" AD-1 packer on 93 - 2 3/8" IPC tubing to 2927. Circulated with 70 barrels of 2% KCl plus inhibited packer fluid. Set 5 1/2" AD-1 packer with 23,000# tension. Pressure to 500 psig - held. Pulled a pressure chart OCD.

02-Dec-04 Before Rate & Pressure: 353 bwpd at 290 psig. RIH with 1 1/4" Perf-Clean Tool on 1 1/4" Coiled Tubing Unit: washed perforations and open hole from 2940' to 3511'. TP=3500 psig, Annulus Press=480 psig. Acidize same interval with 4200 gallons 15% NEFE HCl acid via PerfClean Tool. TP= 4800 psig, Annulus Pressure= 480 psig. POOH & laid down Perf-Clean Tool. After Rate & Pressure: 286 bwpd at 0 psig.

PREPARED BY:

Larry S. Adams

D. Carrizales

UPDATED:

13-Dec-04