

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised June 10, 2003

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

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

¹ Operator Name and Address SDG Resources L. P. P. O. Box 1390 Montrose, CO 81401		² OGRID Number 193003
		³ API Number 30 - 025-11137
³ Property Code 10917 29159	⁵ Property Name Cooper Jal Unit	⁶ Well No. 106

7 Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	18	24-S	37-E		1980	NORTH	660	EAST	Lea

8 Proposed 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
⁹ Proposed Pool 1 JALMAT - 3,324'-3,350'					¹⁰ Proposed Pool 2 LANGLIE MATTIX - 3,340'-3,780'				

¹¹ Work Type Code D	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code FEE	¹⁵ Ground Level Elevation 3,302' K. B.
¹⁶ Multiple No	¹⁷ Proposed Depth 3,780'	¹⁸ Formation TNSL-YTS-7RV-QUN	¹⁹ Contractor GREAT BASIN WELL SERVICE	²⁰ Spud Date Orig 4/02/46

21 Proposed Casing and Cement Program

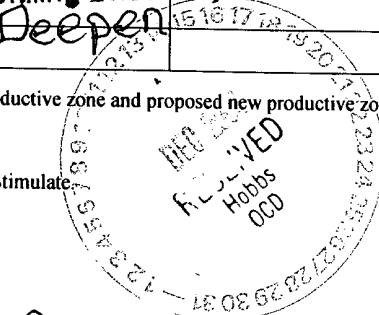
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC

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.

Objectives: Deepen Jalmat producer and complete as a DHC (Jalmat/Langlie Mattix) producer. Acidize and Fracture Stimulate.

1. Use Sentinel Manual BOP rated at 5,000 psig.
2. Recover 4 1/2" Liner and deepen well from 3,587' to 3,780'.
3. Acidize Yates, 7-Rivers and Queen zones with 3,000 gallons. Fracture Stimulate with 120,000# 12/20 mesh sand.
4. Down hole commingle Jalmat and Langlie Mattix zones.

Permit Expires 1 Year From Approval
Data Unless Drilling Underway
Deepen



DHC-3380

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Domingo Carrizales*

Printed name: Domingo Carrizales

Title: Sr. Petroleum Engineer

E-mail Address: domingo@sdgresources.com

Date: 12/09/04

Phone: 432-550-7580

OIL CONSERVATION DIVISION

Approved by: *[Signature]*

Title:

Approval Date: FEB 16 2005

PETROLEUM ENGINEER

Expiration Date:

Conditions of Approval:

Attached ☐

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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 June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-11137	² Pool Code 33820 33820	³ Pool Name JALMAT: YATES, 7RVRS (oil)
⁴ Property Code 10947 29159	⁵ Property Name Cooper Jal Unit	⁶ Well Number 106
⁷ OGRID No. 193003	⁸ Operator Name SDG Resources L. P. P. O. Box 1390 Montrose, CO 81401	⁹ Elevation 3,302' K. B.

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
H	18	24S	37E		1980	NORTH	660	EAST	Lea

11 Bottom Hole Location If Different From Surface

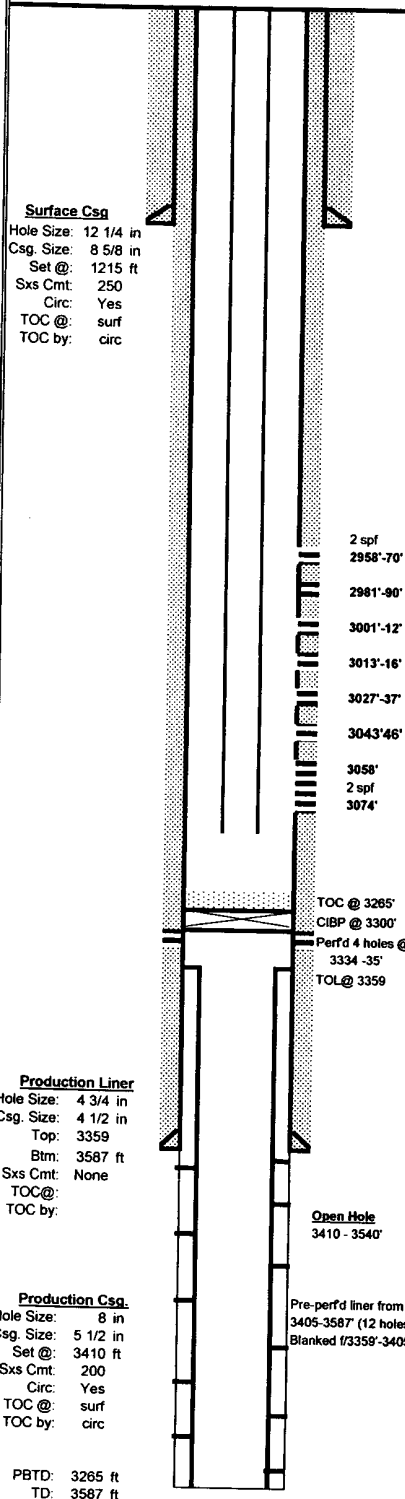
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

18						17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Domingo Carrizales Printed Name Sr. Petroleum Engineer domingo@sdgresources.com Title and E-mail Address 12/09/04 Date
						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

WELLBORE SCHEMATIC AND HISTORY

CURRENT COMPLETION SCHEMATIC



LEASE NAME

Cooper Jal Unit

WELL NO.

106

STATUS:

Active

Gas

AP#

30-025-11137

LOCATION:

1980 FNL & 680 FEL, Sec 18, T - 24S, R - 37E, Lee County, New Mexico

SPUD DATE:

04/02/46

TD

3587

KB

3,302'

DF

3,301'

INT. COMP. DATE:

05/26/46

PBTD

3265

GL

3,204'

GEOLOGICAL DATA

ELECTRIC LOGS:

CORES, DST'S or MUD LOGS:

GR-CCL-MSG-CBL from 3188 - 2900' (3-21-96 Halliburton)

HYDROCARBON BEARING ZONE DEPTH TOPS:

Yates @ 2915'

Seven Rivers @ 3350'

CASING PROFILE

SURF. 8 5/8" - 28#, J-55 set@ 1215' Cmt'd w/250 sxs - circ cmt to surf.

PROD. 5 1/2" - 14#, J-55 set@ 3410' Cmt'd w/200 sxs - circ cmt to surf.

LINER 4 1/2" - 16.6#, FJ liner set from 3359 - 3587 w/12 - 3/8" holes from 3405 - 3587. Not cmt'd.

CURRENT PERFORATION DATA

CSG. PERFS:

OPEN HOLE:

2958 - 70', 2981 - 90', 3001 - 12', 3013 - 16', 3027 - 37', 3043 - 46',
3058 - 74' w/ 2 spf (142 - 0.46" dia holes)

3410 - 3540'

Isolated w/ CIBP @ 3300'

TUBING DETAIL

3/25/1997

ROD DETAIL

Length (ft)

Detail

2920 93 jts - 2 3/8" 4.7#, J-55, 8rd EUE tbg.

3 1 - 2 3/8" x 5 1/2" TAC

190 6 jts - 2 3/8" 4.7#, J-55, 8rd EUE tbg.

1 1 - 2 3/8" OD - S.N.

28 1 - 2 3/8" 8rd, EUE, J-55 slotted & orange peeled MA

3141 btm

WELL HISTORY SUMMARY

19-May-46 Initial completion interval: 3410'-3587', shot with 300 qts nitro. IP=96 bopd, 0 bwpd; GOR=1125 (flowing)

1-Mar-54 C/O fill from 3455 - 3540'

18-Aug-54 C/O fill from 3526 - 80'. Perf'd 4 holes from 3334 - 35' & test w/straddle pkr - had weak blow & rec. 15' oil.

Set 4 1/2", 16.6# FJ liner w/12 - 3/8" holes from 3405 - 3587' and blank pipe from 3359 - 3405'. Did not cmt liner.

After WO: 11 bopd

6-Oct-54 Frac'd OH w/5,000 gals Dowell Petrofrac & 10,000#s sand

8-Aug-57 C/O fill from 3569 - 3587'

20-Mar-96 POOH LD prod equipment. Set CIBP @ 3300' & dmp 35' cmt on top. PBTD @ 3265'. Ran DSN-CBL from 3300 - 2300'.

Good cmt to 2500'. Perf'd (Jalmat) 3074'-58' w/2 spf (34 - 0.46" dia holes). Well flowing after perf'd.

0 bopd, 27 bwpd, 120 Mcfgpd with 800 psi FTP on 17/64" ck. Killed well to recover perforating guns.

Perf'd 2958 - 70', 2981 - 90', 3001 - 12', 3013 - 16', 3027 - 37', 3043 - 46' w/ 2 spf (108 - 0.43" dia holes).

Acid'd perfs 2958'-3074' w/5,000 gals 15% NEFE HCL & 200 - 7/8" RCN ball sealers. Good ball action. PM=2070 - 570 psig.

AIR=7 bpm. ISIP=vac. Flow test well for 21 days. Test = 0 bwpd, 0 bopd, 932 - 219 Mcfgpd. Frac'd perfs (Jalmat)

2958 - 3074' w/76,902 gals 50/50 quality CO2 w/386,120#s 12/20 Brady sand. PM=5008 - 2782 psi. AIR= 45 bpm. ISIP=

1771 psi. P15min=1661 psi. C/O sand from 3024 - 3265' (PBTD). PU & Wait. Retag @ 3245'(20' of fill) TH w/ 2 3/8" tbg

w/SN btm tbg @ 2989'. Placed well on production. After WO: 0 bwpd, 0 bopd, & 427 Mcfgpd. FTP=80 psi.

25-Feb-97 Tagged fill @ 3232' (33' of fill). Did not C/O. Returned well to production.

27-Jun-97 POOH and LD rods & pmp.

18-Apr-01 Swab tbg. No FL found. Pmp 12 bbls acid & 10 bbls flush. WOA 1 hr. Made 5 swab runs. Swab tbg dry. Placed well on prod.

1-Oct-02 Swabbed well to SN. Recovered 1.5 bbls milky emulsion. Made 3 more runs (4.4 bbls) 95% water.

24-Jan-04 Pumped 75 bbls of hot water w/2 1/2 gals of emulsifier breaker down casing. Swabbed from 2880' to 3100' - 35 bbls. PWOP.

PREPARED BY:

Larry S. Adams

D. Canizales

[UPDATED:

08-Apr-04

Lease Name: COOPER JAL UNIT
County, State: LEA, NM
Operator: SDG RESOURCES LIMITED PARTNERSHIP
Field: JALMAT
Reservoir: TANSILL-YATES-SEVEN
Location: 18 24S 37E

