c15F

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: LC-028793-C

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☒ PLUG BACK ☐

7. UNIT AGREEMENT NAME:

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☐

RECEIVED
APR - 1 1991
O. C. D.
ARTESIA, OFFICE

8. FARM OR LEASE NAME: Burch C Federal

2. NAME OF OPERATOR: Phillips Petroleum Company

9. WELL NO.: 6

3. ADDRESS OF OPERATOR: 4001 Penbrook Street, Odessa, Texas 79762

10. FIELD AND POOL, OR WILDCAT: Gb/Jackson-SR-Q-G-SA

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: Unit O, 660' FSL & 1980' FEL
At proposed prod. zone: Unit O, 660' FSL & 1980' FEL

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 23, 17-S, 29-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 3-1/2 miles West of Loco Hills

12. COUNTY OR PARISH: Eddy

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	1115.20	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
±900'SE #14C	3386'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3578' DF

22. APPROX. DATE WORK WILL START*: 03-18-91

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9-7/8"	8-5/8"	28#	366'	100 sx
7-7/8"	7"	20#	2385'	100 sx
6-1/4"	5-1/2"	14#	3255'	35 sx

AMENDED PROCEDURE.
Please see attached sheets for detailed procedure.

-over-

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Jay Mapley for L. M. Sanders TITLE Reg. & Proration Supv. DATE 03-20-91

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 3/29/91

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

BURCH "C" FEDERAL NO. 6
RECOMMENDED PROCEDURE

NOTE: 1. This is a No Category well.
2. Notify NMOCD and BLM 24 hours before commencing work.

STAGE I:

1. MI and RU DDU. Pull rods and pump. Install BOP. COOH with 2-3/8" production tbg. Tag TD to check for fill. If necessary, clean out to ±3326'.

2. RU _____ to perforate and set CIBP. GIH with 4" csg gun, using 1/2" GSC charges, 4 spf, and perforate 5-1/2" casing at ±2600'. COOH with perforating gun. GBIH with CIBP & set at ±2700'. COOH.

3. GIH w/ 5-1/2" RTTS-type packer on 2-3/8" workstring. Set RTTS @ ±2650' and test CIBP to 500 psi. Reset RTTS at ±2550'. Establish pump in rate through perforations. Circulate, if possible, to clean up 5-1/2" x 7" annulus.

Note: If circulation is not possible, contact Steve Jones (x1549) or Kyle Hart (x1285) for further instructions. If necessary, individual block squeezes may be attempted as follows:

i. Reset RTTS at 2450' and squeeze open perferations at 2600' with 25 sxs Class "C" with 2% $CaCl_2$. (**Note:** Approximate pump time is 2 hours.) Max pressure 1000 psi.
ii. Reset RTTS @ ±2460'. RU _____ to perforate through tubing with 1-11/16" Hollow-Carrier gun, 2 spf, @ 2475'. Establish pump in rate through perforations. Circulate, if possible, to clean up 5-1/2" x 7" annulus. If circulation is possible, perform step 4 with retainer set at ±2425'.
iii. If unable to circulate reset RTTS at 2350'. Squeeze perforations at 2475' with 25 sxs Class "C" with 2% $CaCl_2$. (**Note:** Approximate pump time is 2 hours.) Max pressure 1000 psi. Go to step 5.

4. COOH with RTTS & workstring. GIH with 5-1/2" retainer on 2-3/8" workstring. Set retainer @ ±2550'. MI & RU Cementer to perform squeeze. Test all surface lines to 2000 psig. Pump 50 sxs of Class "C" with 2% $CaCl_2$. (**Note:** Approximate pump time is 2 hours.) Do not exceed 1000 psig. COOH with workstring to ±2300'. Reverse out excess cement. COOH and SI for 24 hours.

5. PU 6-1/4" bit & DC's and drill out to top of 5-1/2" casing at 2339'. COOH and PU 4-3/4" bit and drill out to ±3386' (60' deeper than current TD) with produced water. Circulate hole clean. COOH & LD bit & DC's.

6. MI & RU _____ to perforate the following zones through the 5-1/2" & 7" csg with a 4" perforating gun and 1/2" GSC charges, 1 JSPF, at the following depths (**Note:** Correlate perforating depths to Lane's GR-Neutron log dated 6/22/56):

<u>San Andres</u>
3040'-3044' (5 shots).

<u>Jackson</u>
2857'-2880' (24 shots), 2820'-2830' (11 shots), 2804'-2810' (7 shots), 2798'-2800' (3 shots), 2773'-2787' (15 shots), 2760'-2764' (5 shots), 2752'-2756' (5 shots), 2740'-2746' (7 shots), 2728'-2732' (5 shots).

<u>Premier</u>
2508', 2506', 2504', 2502', 2500', 2498'.

<u>Metex</u>
2414', 2410', 2388', 2384', 2380', 2374', 2372', 2342'.

<u>Loco Hills</u>
2274', 2272', 2270', 2268', 2266', 2264', 2262', 2260'.

TOTAL SHOTS = 109 shots

7. GIH with 5-1/2" RTTS-type pkr on ±900' of 2-7/8", 6.5#/ft, EUE 8rd N-80 tbg & ±2250' 3-1/2", 9.3 lb/ft, EUE 8rd N-80 tbg. Test tbg to 5000 psi while GIH. Set packer @ ±3150'.

8. Acidize open hole Keely zone at 3255'-3386' with 6000 gals Pentol 200 (20% NEFe HCl) in four stages using 1200 lb of rock salt in 1200 gals 9 ppg brine as a blocking agent as follows:

a. Pressure test lines to 3500 psi. Load annulus, if possible, and monitor casing pressure throughout treatment for any indication of communication.
b. Pump 1500 gals Pentol 200.
c. Pump 400 gals blocking agent.
d. Repeat b and c twice.
e. Pump 1500 gals Pentol 200.
f. Flush to bottom of open hole interval with lease produced water.

Maximum Treating Pressure = 3000 psi
Maximum Treating Rate = 6 BPM

9. Shut in four hours. Swab back load from Keely.

10. Frac treat Keely open hole zone at 3255'-3386' with 21,000 gals polyemulsion (2/3 lease crude and 1/3 30 lb gelled 2% KCl water with non-ionic emulsifier) carrying 63,500 lbs 20/40 mesh Vulcan Texsan sand, as follows:

Note:

* Review **Attachment I** on safety precautions for polyemulsion treatments.
* Nipple up wellhead so that well can be flowed back within 30 seconds of pump shut down.
* Install flow meter so that a rate of 5-10 gals/min can be monitored.
* Leave pressure connected to the van so that the fracture pressure can be monitored.
* Ensure that choke is completely closed before start of flowback.
* **LEASE CRUDE MUST BE IN FRAC TANKS OR STOCK TANK BARRELS AT ATMOSPHERIC PRESSURE AT LEAST 24 HOURS PRIOR TO JOB.**

a. Test all lines to 5000 psi. Install pressure relief valve on treating line and set it to relieve at 5000 psi. Load annulus, if possible, and monitor casing pressure throughout treatment for any indication of communication.
b. Pump 7500 gals polyemulsion as pad.
c. Pump 2000 gals with 2 ppg of 20/40 mesh sand.
d. Pump 2000 gals with 3 ppg of 20/40 mesh sand.
e. Pump 2500 gals with 4 ppg of 20/40 mesh sand.
f. Pump 2500 gals with 5 ppg of 20/40 mesh sand.
g. Pump 2500 gals with 6 ppg of 20/40 mesh sand.
h. Pump 2000 gals with 8 ppg of 20/40 mesh sand.
i. Flush to 3150' (RTTS depth) with 1/4 polyemulsion and 3/4 gelled water. **DO NOT OVERFLUSH.**
j. SI, record ISIP, then flow back within 30 seconds of pump shutdown. Monitor for closure, and continue to flow at a maximum rate of 10 gal/min for 30 minutes after fracture closure. After closure, flow at a maximum rate of 1/2 bbl/min until well dies.

Max. Treating Pressure = 4500 psi
Max. Treating Rate = 15 BPM

Minimum Inventory to Have on Location Prior to Treatment:

* 76,500 lbs Vulcan Texsan 20/40 sand.
* Frac tanks with 16,380 gals (390 bbls) lease crude.
* Frac tanks with 8,778 gals (209 bbls) gelled water.
* Firefighting equipment, sample bottles, and Fann 35 viscometer to be supplied by service company.

11. COOH with RTTS & workstring. LD RTTS & GBIH with workstring and CO to TD. COOH & LD workstring.

12. PU 2-3/8" production string & packer & GIH to ±3200'. Set packer. Remove BOP and run rods and pump. Place well on production & report daily tests on DDR.

Zone will be pumped approximately one week before proceeding with next step.

STAGE II:

13. Pull rods & pump. NU BOP & COOH with production string & packer. PU 3-1/2" x 2-7/8" tapered workstring and GIH with 5-1/2" RBP and RTTS. Test tubing in hole to 5000 psi. Set RBP at ±3130'. Test RBP to 1000 psi. Reset RTTS at ±2940'.

14. Acidize new San Andres perfs at 3040'-3044' and present SA perfs at 3055'-3082' in 3 stages with 1800 gals Pentol 200 (20% NEFe HCl) using 350 lb rock salt in 350 gals 9 ppg brine as a blocking agent, as follows:

    a. Pressure test lines to 3500 psi. Load annulus, if possible, and monitor casing pressure throughout treatment for any indication of communication.
    b. Pump 600 gals Pentol 200.
    c. Pump 175 gals blocking agent.
    d. Repeat steps b and c.
    e. Pump 600 gals Pentol 200.

    Maximum Treating Pressure = 3000 psi
    Maximum Treating Rate = 5 BPM

15. Flush to 3082' with produced water. Shut in four hours. Swab back load from San Andres perfs.

16. Frac treat San Andres with 17,000 gallons polyemulsion (2/3 lease crude and 1/3 30# gelled 2% KCL water with non-ionic emulsifier) carrying 44,500 lbs. 16/30 Vulcan Texsan sand as follows:

    Note: Review the six Notes listed in step 10, page 3.

    a. Test all lines to 5000 psi. Install pressure relief valve on treating line and set it to relieve at 5000 psi. Load annulus, if possible, and monitor casing pressure throughout treatment for any indication of communication.
    b. Pump 6000 gals polyemulsion as pad.
    c. Pump 2000 gals with 2 ppg of 16/30 mesh sand.
    d. Pump 2000 gals with 3 ppg of 16/30 mesh sand.
    e. Pump 2500 gals with 4 ppg of 16/30 mesh sand.
    f. Pump 2500 gals with 5 ppg of 16/30 mesh sand.
    g. Pump 2000 gals with 6 ppg of 16/30 mesh sand.
    h. Flush to 2940' (RTTS depth) with 1/4 polyemulsion and 3/4 gelled water. **DO NOT OVERFLUSH.**

i. SI, record ISIP, then flow back within 30 seconds of pump shutdown. Monitor for closure, and continue to flow at a maximum rate of 10 gal/min for 30 minutes after fracture closure. After closure, flow at a maximum rate of 1/2 bbl/min until well dies.

Max. Treating Pressure = 4500 psi
Max. Treating Rate = 15 BPM

Minimum Inventory to Have on Location Prior to Treatment:

* 53,400 lbs Vulcan Texsan 16/30 sand.
* Frac tanks with 12,685 gals (302 bbls) lease crude.
* Frac tanks with 7,014 gals (167 bbls) gelled water.
* Firefighting equipment, sample bottles, and Fann 35 viscometer to be supplied by service company.

17. Release RTTS & COOH. LD packer & GBIH with workstring. Clean out to top of RBP. COOH & LD workstring.

18. PU 2-3/8" production string & packer & GIH. Set packer @ ±3000'. Remove BOP and run rods and pump. Place well on production & report daily tests on DDR.

Zone will be pumped approximately one week before proceeding with next step.

STAGE III:

19. Pull rods & pump. NU BOP & COOH laying down production equipment. PU tapered workstring & GIH with RTTS & RBP setting tool. Test tubing in hole to 3500 psi. Reset RBP at ±2930'. Test RBP to 1000 psi. Reset RTTS at ±2675'.

20. Acidize Jackson perfs at 2728'-2880' with 8000 gals Pentol 200 (20% NEFe HCl), diverting with 100 1.3 sg RCN ball sealers, as follows:

a. Pressure test lines to 3500 psi. Load annulus, if possible, and monitor casing pressure throughout job for any indication of communication.
b. Establish pump-in rate with produced water. If 5 BPM rate cannot be established, release pkr and spot 200 gals 15% HCl with fines suspension agents & stabilizers across perfs. Reset pkr and bullhead acid to break down perfs.
c. Pump 1600 gals Pentol 200 (20% NEFe HCl).
d. Pump 4800 gals Pentol 200 (20% NEFe HCl), dropping 100 balls spaced evenly.
e. Pump 1600 gals Pentol 200 (20% NEFe HCl).
f. Flush to 2880' with produced water.

Maximum Treating Pressure = 3000 psi
Maximum Treating Rate = 5 BPM

21. Shut in four hours. Release pkr & knock ball sealers off perfs. Reset pkr & swab back load from Jackson perfs. COOH & LD workstring. (Jackson will not be frac'd.)

22. PU 2-3/8" production string & packer. Set packer @ ±2675'. Remove BOP and run rods and pump. Place well on production & report daily tests on DDR.

Zone will be pumped approximately one week before proceeding with next step.

STAGE IV:

23. Pull rods & pump. NU BOP & COOH with production tubing & packer. PU 2-7/8" x 3-1/2" tapered workstring & GIH with RTTS. Test tubing in hole to 4000 psi. Reset RBP at ±2560'. Test RBP to 1000 psi. Reset RTTS at ±2450'.

24. Acidize Premier perfs at 2498'-2508' with 500 gals 7-1/2% NEFe HCl acid containing fines suspension agents and clay stabilizers, diverting with eight 1.3 sg RCN ball sealers, as follows:

    a. Pressure test lines to 4000 psi. Load annulus, if possible, and monitor casing pressure throughout treatment for any indication of communication.
    b. Establish pump-in rate with produced water. If rate of 5 BPM cannot be established, release pkr and spot 200 gals 15% HCl with fines suspension agents and stabilizers across perfs. Reset pkr and bullhead acid to break down perfs.
    c. Pump 100 gals 7-1/2% NEFe HCl acid.
    d. Pump 300 gals 7-1/2% NEFe HCl acid, dropping 8 balls spaced evenly.
    e. Pump 100 gals 7-1/2% NEFe HCl acid.
    f. Flush to 2508' with produced water.

    Maximum Treating Pressure = 3500 psi
    Maximum Treating Rate = 5 BPM

25. Release pkr. Knock ball sealers from perfs at 2498'-2508'. Reset pkr at ±2450'. Swab back load from Premier perfs.

26. Frac treat Premier perfs at 2498'-2508' with 10,000 gals polyemulsion (2/3 lease crude and 1/3 30 lb gelled 2% KCl water with non-ionic emulsifier) carrying 26,000 lbs 16/30 mesh Vulcan Texsan sand, as follows:

    Note: Review the six Notes listed in step 10, page 3.

    a. Test all lines to 4000 psi. Install pressure relief valve on treating line and set it to relieve at 4000 psi. Load annulus, if possible, and monitor casing pressure during treatment for any indication of communication.
    b. Pump 3500 gals polyemulsion as pad.
    c. Pump 1000 gals with 2 ppg of 16/30 mesh sand.
    d. Pump 1500 gals with 3 ppg of 16/30 mesh sand.
    e. Pump 1500 gals with 4 ppg of 16/30 mesh sand.

f. Pump 1500 gals with 5 ppg of 16/30 mesh sand.
g. Pump 1000 gals with 6 ppg of 16/30 mesh sand.
h. Flush to 2450' (RTTS depth) with 1/4 polyemulsion and 3/4 gelled water. **DO NOT OVERFLUSH.**
i. SI, record ISIP, then flow back within 30 seconds of pump shutdown. Monitor for closure, and continue to flow at a maximum rate of 10 gal/min for 30 minutes after fracture closure. After closure, flow at a maximum rate of 1/2 bbl/min until well dies.

Maximum Treating Pressure = 3500 psi
Maximum Treating Rate = 15 BPM

Minimum Inventory to Have on Location Prior to Treatment:

* 31,500 lbs Vulcan Texsan 16/30 sand.
* Frac tanks with 7,896 gals (188 bbls) lease crude.
* Frac tanks with 4,494 gals (107 bbls) gelled water.
* Firefighting equipment, sample bottles, and Fann 35 viscometer to be supplied by service company.

27. Release RTTS & COOH. LD pkr & GBIH with workstring. Clean out to top of RBP. COOH & LD workstring.

28. PU 2-3/8" production string & packer. Set packer @ ±2450'. Remove BOP and run rods and pump. Place well on production & report daily tests on DDR.

Zone will be pumped approximately one week before proceeding with next step.

STAGE V:

29. Pull rods & pump. NU BOP & COOH. Lay down packer. GBIH with 5-1/2" RTTS & RBP setting tool on production tubing. Reset RBP @ ±2450' and test to 500 psi. COOH laying down production tubing & RTTS. PU 3-1/2" workstring workstring & GIH with 7" RTTS. Test tubing in hole to 4000 psi. Set RTTS at ±2290'.

30. Acidize Metex perfs at 2342'-2414' with 1250 gals 7-1/2% NEFe HCl acid containing fines suspension agents and clay stabilizers. Divert with ten 1.3 sg RCN ball sealers, as follows:

a. Pressure test lines to 4000 psi. Load annulus, if possible, and monitor casing pressure throughout treatment for any indication of communication.
b. Establish pump-in rate with produced water. If rate of 5 BPM cannot be established, release pkr and spot 200 gals 15% HCl with fines suspension agents and stabilizers across perfs. Reset pkr and bullhead acid to break down perfs.
c. Pump 250 gals 7-1/2% NEFe HCl acid.
d. Pump 750 gals 7-1/2% NEFe HCl acid, dropping 10 balls spaced evenly.
e. Pump 250 gals 7-1/2% NEFe HCl acid.
f. Flush to 2414' with produced water.

Maximum Treating Pressure = 3500 psi
Maximum Treating Rate = 5 BPM

31. Surge ball sealers from perfs at 2342'-2414'. Swab back load from Metex perfs.

32. Frac treat Metex perfs at 2342'-2414' with 20,000 gals polyemulsion (2/3 lease crude and 1/3 30 lb gelled 2% KCl water with non-ionic emulsifier) carrying 67,000 lbs 16/30 mesh Vulcan Texsan sand, as follows:

Note: Review the six Notes listed in step 10, page 3.

a. Test all lines to 4000 psi. Install pressure relief valve on treating line and set it to relieve at 4000 psi. Load annulus, if possible, and monitor casing pressure throughout job for any indication of communication.
b. Pump 6500 gals polyemulsion as pad.
c. Pump 1000 gals with 2 ppg of 16/30 mesh sand.
d. Pump 2000 gals with 3 ppg of 16/30 mesh sand.
e. Pump 2500 gals with 4 ppg of 16/30 mesh sand.
f. Pump 3000 gals with 5 ppg of 16/30 mesh sand.
g. Pump 3000 gals with 6 ppg of 16/30 mesh sand.
h. Pump 2000 gals with 8 ppg of 16/30 mesh sand.
i. Flush to 2290' (RTTS depth) with 1/4 polyemulsion and 3/4 gelled water. **DO NOT OVERFLUSH.**
j. SI, record ISIP, then flow back within 30 seconds of pump shutdown. Monitor for closure, and continue to flow at a maximum rate of 10 gal/min for 30 minutes after fracture closure. After closure, flow at a maximum rate of 1/2 bbl/min until well dies.

Maximum Treating Pressure = 3500 psi
Maximum Treating Rate = 15 BPM

Minimum Inventory to Have on Location Prior to Treatment:

* 80,500 lbs Vulcan Texsan 16/30 sand.
* Frac tanks with 15,582 gals (371 bbls) lease crude.
* Frac tanks with 8184 gals (195 bbls) gelled water.
* Firefighting equipment, sample bottles, and Fann 35 viscometer to be supplied by service company.

33. Release RTTS & COOH. LD RTTS & GBIH with workstring. Clean out to top of RBP. COOH. PU RBP setting tool & GBIH. Retrieve RBP & COOH. **Note:** Metex will not be tested individually at this time.

STAGE VI:

34. PU 3-1/2" workstring & GIH with 7" RBP & RTTS. Test tubing in hole to 4000 psi. Set RBP at ±2300'. Test RBP to 500 psi. Reset RTTS at ±2200'.

35. Acidize Loco Hills perfs at 2260'-2274' with 500 gals 7-1/2% NEFe HCl acid containing fines suspension agents and clay stabilizers, diverting with ten 1.3 sg RCN ball sealers, as follows:

a. Pressure test lines to 4000 psi. Load annulus & pressure to 500 psi. Monitor casing pressure throughout treatment for any indication of communication.
b. Establish pump-in rate with produced water. If rate of 5 BPM cannot be established, release pkr and spot 200 gals 15% HCl with fines suspension agents and stabilizers across perfs. Reset pkr @ 2200' and bullhead acid to break down perfs.
c. Pump 100 gals 7-1/2% NEFe HCl acid.
d. Pump 300 gals 7-1/2% NEFe HCl acid, dropping ten balls spaced evenly.
e. Pump 100 gals 7-1/2% NEFe HCl acid.
f. Flush to 2274' with produced water.

Maximum Treating Pressure = 3500 psi
Maximum Treating Rate = 5 BPM

36. Release pkr. Knock ball sealers from perfs at 2260'-2274'. Reset pkr at ±2160'. Swab back load from Loco Hills perfs.

37. Frac treat Loco Hills perfs at 2260'-2274' with 13,500 gals polyemulsion (2/3 lease crude and 1/3 30 lb gelled 2% KCl water with non-ionic emulsifier), carrying 37,000 lbs 16/30 mesh Vulcan Texsan sand, as follows:

Note: Review the six Notes listed in step 10, page 3.

a. Test all lines to 4000 psi. Install pressure relief valve on treating line and set it to relieve at 4000 psi. Pressure annulus to 500 psi with produced water and maintain during treatment for any indication of communication.
b. Pump 4500 gals polyemulsion as pad.
c. Pump 500 gals with 1 ppg of 16/30 mesh sand.
d. Pump 1000 gals with 2 ppg of 16/30 mesh sand.
e. Pump 1500 gals with 3 ppg of 16/30 mesh sand.
f. Pump 2000 gals with 4 ppg of 16/30 mesh sand.
g. Pump 2000 gals with 5 ppg of 16/30 mesh sand.
h. Pump 2000 gals with 6 ppg of 16/30 mesh sand.
i. Flush to 2160' (RTTS depth) with 1/4 polyemulsion and 3/4 gelled water. **DO NOT OVERFLUSH.**
j. SI, record ISIP, then flow back within 30 seconds of pump shutdown. Monitor for closure, and continue to flow at a maximum rate of 1/2 bbl/min until well dies.

Maximum Treating Pressure = 3500 psi
Maximum Treating Rate = 10 BPM

Minimum Inventory to Have on Location Prior to Treatment:

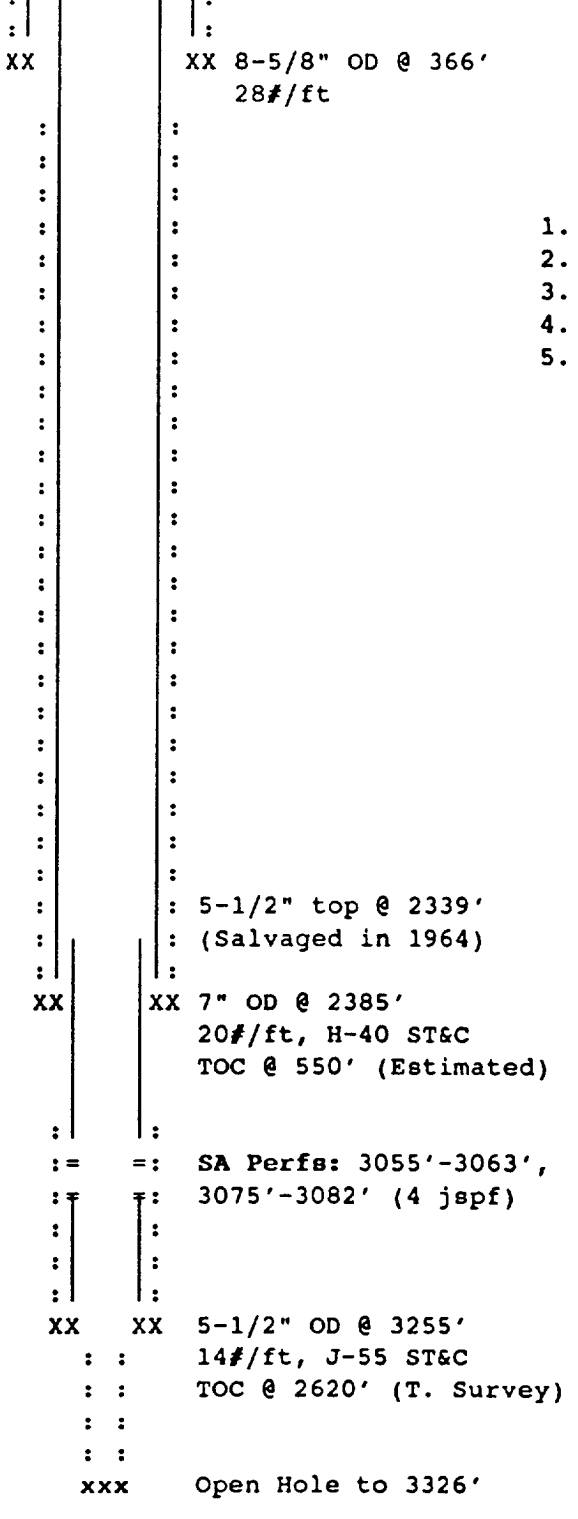
* 44,500 lbs Vulcan Texsan 16/30 sand.
* Frac tanks with 10,206 gals (243 bbls) lease crude.
* Frac tanks with 5,550 gals (132 bbls) gelled water.
* Firefighting equipment, sample bottles, and Fann 35 viscometer to be supplied by service company.

38. Release RTTS & COOH. LD packer & GBIH with workstring. Clean out to top of RBP. COOH with workstring.

39. GIH with 2-3/8" production string. Remove BOP and run rods and pump. Place well on production & report daily tests on DDR

PHILLIPS PETROLEUM COMPANY--PERMIAN BASIN REGION

RKB@ _____
CHF@ _____
GL@ 3578'



Area North **Date:** March 11, 1991
Subarea Loco Hills
Lease & Well No. Burch "C" Fed. #6 **NOT A CATEGORY WELL**
Legal Description 660' FSL & 1980' FEL, Section 23, T-17-S & R-29-E, Eddy County, New Mexico
Field Grayburg-Jackson
Status Shut-in (at least since 1987)
Tubing: 2-3/8", 4.7# J-55 @ 3297'
Packer: Guiberson G-2 @ 3031'
Tubing Head: Not shown in records

Stimulation History:

	Interval	Date	Type	Gallons	Lbs. Sd	MP	ISIP	IR
1.	2385'-2870'	2/43	acid	500	---	?	?	?
2.	2385'-2870'	2/43	acid	1000	---	?	?	?
3.	3255'-3326'	6/56	20%	1000	---	1900	1450	2.2
4.	3255'-3326'	6/56	FRAC	31248	54000	2200	2100	32
5.	3055'-3082'	10/61	20%	500	---	Vac	Vac	?

Hole/Casing Condition: As shown. Drilled 1943. Deepened in 1956. Salvaged top 2339' of 5-1/2" in 1964.

Workover Proposal: Squeeze cement behind the 5-1/2" csg. Add additional Keely and San Andres pay, along with new Loco Hills, Metex and Premier pay. Test and treat each zone individually.

Recommended Procedure: See Attached.

	5-1/2" 14#/ft J-55	7", 20# H-40
ID	5.012"	6.456"
Drift	4.887"	6.331"
Collapse	2,940 psi	1,860 psi
Burst	4,000 psi	2,550 psi
Tension	105,000 lbs	117,000 lbs

	2-3/8" 4.7#, J-55	3-1/2" 9.3#, N-80	2-7/8" 6.5#, N-80
ID	1.995"	2.992"	2.441"
Drift	1.901"	2.867"	2.347"
OD Cplg	3.063"	4.500"	3.668"
Collapse	7,040 psi	9,160 psi	9,710 psi
Burst	6,290 psi	7,950 psi	8,270 psi
Tension	47,700 lbs	133,700 lbs	93,500 lbs