3E COMPANY, INC.

Engineering • Energy • Exploration

P. O. Box 190 —:— 505/326-1135

FARMINGTON, NEW MEXICO 87499

September 25, 1984

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, NM 87501

Attention Engineering Section

Re: Downhole Comingle Application
Elliott Oil Co. Ora #2 G-21-25N-3W
Rio Arriba County, NM

Gentlemen:

Please accept this as an application to downhole comingle production from Mesa Verde, Gallup and Dakota formations in the subject well.

The operator is Elliott Oil Co., P.O. Drawer 1355, Roswell, NM 88201.

The well is the No.2 Ora, 1750' FNL and 2000' FEL 21-25N-3W Rio Arriba County, NM. Zones to be comingled are the Blanco Mesa Verde and the Ojito Gallup-Dakota.

A plat showing this well and all offsetting lease holders is attached.

No recent C-116's have been submitted because of production problems in both the Dakota-Gallup and Mesa Verde.

No production decline curves are available on either zone. Attached are copies of the work done on each of these zones. The initial test on the Dakota-Gallup interval was 72 oil and 550 mcfd gas. The initial Mesa Verde test was 914 mcfd. Shortly after this test, the Mesa Verde began to produce 200 bbls of water daily. The gas in this zone would not lift the water and the well remained dead. The attached reports show that a workover commenced on 8-8-84 to squeeze off the upper Mesa Verde perforations. This workover successfully stopped production of water in the Mesa Verde. After this workover, production from the Mesa Verde was estimated at 75 mcfd and no water. A piston lift system was installed in the Dakota-Gallup side, but apparent inadequate pressures did not allow the system to work satisfactorily. The operator plans to comingle all zones and use a rod pump to artifically lift production.

No measured bottom hole pressures on either zone have been made. Estimated bottom hole for the Mesa Verde is 1500psi, based on shut-in pressures from before the last workover. The Dakota-Gallup pressure is estimated at 2100psi.

The Mesa Verde interval will produce little liquid hydrocarbon and thus its gas will comingle with oil from the Dakota-Gallup. No incompatibilities should exist.

The value of the comingled production will not be less than the sum of the values of the individual zones. Neither zone should hamper the productive capability of the other interval.

Allocation of production is to be as follows:

Oil:	
Dakota-Gallup	95%
Mesa Verde	5%
Gas:	
Dakota-Gallup	90%
Mesa Verde	10%

These were based on limited testing of the individual zones and the operators understanding of their ability to produce.

All offset operators have been made aware of this application by certified mail.

Sincerely,

John Alexander

John Alexander
Agent for Elliott Oil Co.

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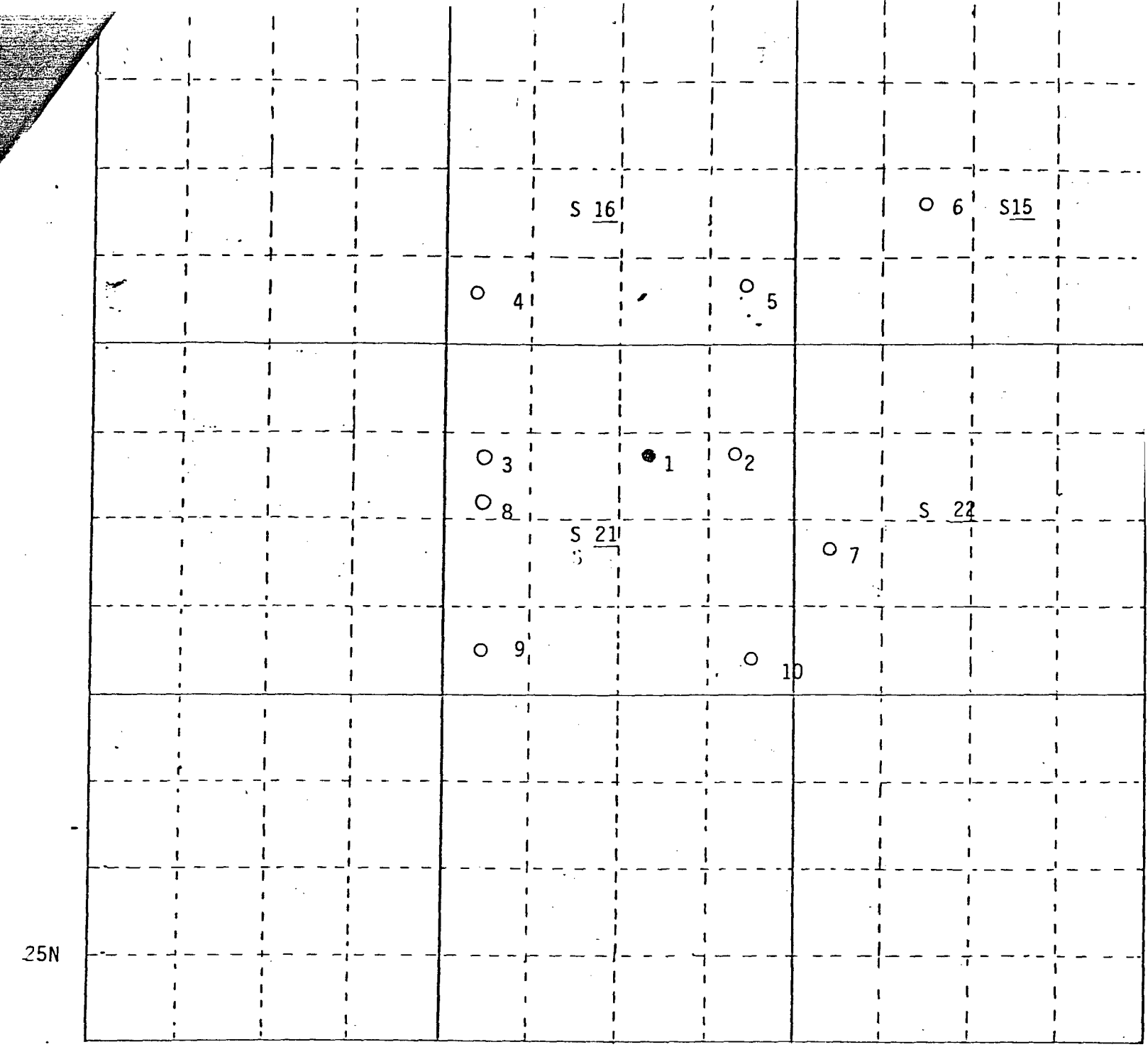
Enclosure



ELLIOTT OIL COMPANY OFFSET WELLS TO ORA No.2

1. Elliott Oil Company, Ora No. 2 1750'/N & 2000'/E 21-25N-3W
2. EPNG, Hall No. 3, 1495'/N & 1190'/E 21-25N-3W
3. Elliott Oil Co., Ora No. 1 1520'/N & 790'/W
4. Schalk Development Corp., Schalk 41 No. 1, 790'/S & 790'/W 16-25N-3W
5. Schalk Development Crop., Schalk 41 No. 3, 790'/S & 790'/E
6. EPNG, Hall No. 6, 1850'/S & 1850'/W 15-25N-3W
7. EPNG, Hill No. 2, 1500'/S & 990'/W 22-25N-3W
8. Dome Petroleum, Hall No. 5, 1850'/N & 790'/W 21-25N-3W
9. EPNG, Hall No. 4, 870'/S & 1070'/W 21-25N-3W
10. Dome Petroleum, Hall No. 4, 850'/S & 890'/E 21-25N-3W (NOW TEXACO)

El Paso Natural Gas, P.O Box 990, Farmington, N.M 87401
Dome Petroleum, 3600 Southside River Road, Farmington, N.M 87401
Schalk Development, Box 25825, Albuquerque, N.M 87125

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Farmington, New Mexico 87499

January 11, 1983

ELLIOT OIL CO.
Ora #2

12/07/82: Check csg. press. at 1050 psi., tbg. press. at 900 psi. Open tbg. and csg. to atmosphere through separator. Press. decr. to 150 psi. and started to unload oil mist. Move in Action Well Service Rig #3. Unload 31 jts. 2 3/8" EUE 4.7 lb. tubing and 266 jts. 2 1/16 I.J. 3.25 lb. tubing. Kill tubing with 20 bbl. KCL water and annulus with 50 bbl. KCL water. Install BOP. Ran 24 jts. 2 3/8" tubing to tag sand at 8006' (top Dakota perf. at 8134') indicating 128' of sand above Dakota perfs. Pulled 12 stds. to 7249'. Pipe rams on BOP would not hold pressure. Wait on ram rubbers. Install new rubbers. S.D.F.N.

12/08/82: Open casing to atmosphere and released gas pressure. No fluid unloaded. Kill annulus with 20 bbl. KCL wtr. and tbg. with 10 bbl. KCL water. Install new BOP. Ran 2 3/8" tbg. to tag sand at 8006'. R.U. Western and clean out sand with foam from 8006' to p.b.t.d. Strap out of hole and check t.d. at 8191'. R.U. Gerhart and set Baker Model "D" Production Packer at 6370' R.K.B. Wire line did not shear off packer. Load hole w/170 bbl. KCL wtr. Pulled out of rope socket. S.D.F.N.

12/09/82: Ran in hole with overshot and 3 1/8" jars on 2 3/8" tubing. Tag sand at 6323'. R.U. Western and reverse sand clean to tag fish at 6366'. Jarred free w/45,000 lb. total pull. P.O.H. Did not recover fish. TIH with assembly as above. Set 10,000 lb. on fish. Jarred 5 times at 50,000 lb. and fish came free. Attempt to reverse circ. with no circulation at 500 psi. P.O.H. Recovered fish with no visible damage to packer setting tool. R.U. Western to pump down 9 5/8" - 7" casing annulus. Establish rate at 1 b.p.m. and 1,000 psi., i.s.i.p/ was 850 psi. S.D.F.N.

12/10/82: R.U. Gerhart and perforate Mesa Verde with 4" hollow carrier gun and 0.38" holes at 6222-6228 (5 holes) and 6186-6192 (5 holes). Western broke perfs with KCL water at 2300 psi., establish rate at 6.7 bpm. and 1500 psi. Perforate Mesa Verde 6084-6116 (28 holes). All perforating from CCL - CBL log as correlated to open hole density log of 09/11/82. TIH with 56 jts. 2 3/8" tg. and layed down. S.D.F.N.

12/11/82: R.U. Western Co. and acidize down 7" csg. w/2,000 gal. 7 1/2% HCL and 58 ball sealers. Establish rate at 48 b.p.m. and 1300 psi., obtain near ball out at 3,000 psi. Gearhart ran junk basket to liner top at 6250, recover no ball.

Fracture Mesa Verde perfs. 6084-6228 down 7" csg. with 90,000 gal. 1% KCL water and 100,000 lb. 20-40 sand as follows:

15,000 gal.	PAD	51 bpm at 1050 psi.
50,000 gal.	1 lb. 20-40	50 bpm at 1000 psi.
25,000 gal.	2 lb. 20-40	50 bpm at 1000 psi.
10,000 gal.	Flush	25 bpm at 600 psi.

(Note: had trouble with tank valve on flush). ISIP 400 psi, decreasing to 100 psi. in 15 min. total load due 2904 bbl.

Open well to atmosphere and start flow back. S.D.F.N.

Well dead when checked 12/12/82.

12/12/82: Shut down for Sunday.

12/13/82: Well dead. Pick up Halliburton retrievable bridge plug and run in hole on 67 stds. 2 3/8" tbg. to set at 4243'. Pull one std. and R.U. Halliburton cement truck. Load hole and pressure test to 3,000 psi., held. OK. Circ. hole with fresh water. Spotted 2 sk. sand through tubing and P.O.H. R.U. Jet West Wireline and perforate two holes at 3650' (bottom of Ojo Alamo). Estab. rate at 5 bpm. and 1400 psi., i.s.i.p = 850 psi. Ran 58 stds. 2 3/8" tbg. to 3665' and spotted 50 sk. Class "B" cement with 0.8% Halad 9. Pulled 7 stds. tbg. to 3220'. Pump down tbg. and annulus at 1/4 bpm. at max. pressure of 800 psi. with 7 3/4 bbl. Slurry into perfs. Pressure broke to 500 psi. Shut down and press. decr. to 200 psi. over 2 hr. period. Released press. and recovered 1/2 bbl. water. P.O.H. Loaded hole and pressure to 200 psi. S.D.F.N.

12/14/82: Open csg. to atmosphere with small blow dying immediately. Wilson Service Co. ran a temperature survey and the cement top at 3500' with t.d. at 3602'. Picked up 6 1/4" bit and casing scraper for 7" casing. Bit would not pass through the tubing hanger. Waited on 6 1/8" bit 2 3/4 hrs. Run in hole with 6 1/8" re-run bit and csg. scraper on 57 stds. 2 3/8" tbg. Tag cmt. at 3610'. R.U. power swivel and pump to reverse circulate. Drill semi-set cement 3610' to 3673' with no restrictions. Raise tbg. to 3421'. Close rams and test casing to 350 psi., fell off to 200 psi. in 10 mins. then began slow decrease. Shut down for night.

12/15/82: P.O.H. with tbg. and drilling assembly. R.U. Halliburton. Pressure test to 400 psi. with slow leak as yesterday. Establish rate at 2 bpm. at 2500 psi. ISIP was 1400 psi. with constant leak to 950 psi. in 20 min. T.I.H. with open ended tbg. to 3665'. Spot 50 sk. Class "B" with 0.6% Hald 9. Pulled 7 stds. tubing to 3220'. Pmp. down tbg. and casing with steady pressure increase to 2500 psi. Moved 1 1/2 bbl. after pressure reached 2500. With total of 4 1/2 bbl. pumped, press. incr. to 2600 psi., stopped pumping. Waited 30 min. and press. decreased to 1975 psi. Released pressure and recovered 1 1/2 bbl. water, leaving 3 bbl. cement outside the casing. P.O.H. Loaded hole. S.D.F.N.

12/16/82: TIH with 6 1/8" bit and casing scraper for 7" casing on 2 3/8" tubing. TAG cement at 3447' and rig up power swivel to drill with reverse circulation. Drill good cement 3447' to 3670'. Ran 2 stds. with no restrictions. Pulled up to 3460'. Pressure test casing to 200 psi., held steady 1 hr. P.O.H. and lay down drilling assembly. TIH with notched pin clooar on 57 stands of 2 3/8" tubing to 3586'. Swabbed for two hours and recovered 60 bbl. wtr., lowering fluid level to 1500'. S.D.F.N.

12/17/82: R.U. to swab. Check fluid level at 1500'. No change from last night. R.U. Western Co. and unload hole with nitrogen. Waited one hour and unload again with a continual water mist for 40 min. R.U. to swab, and went to bottom of tbg. with no fluid recovery, waited 1 hr. and made second swb. run with no fluid entry. P.O.H. Pick up retrieving head for Halliburton B.P. TIH to tag sand at 4228'. Reverse sand from 4228 to b.p. at 4243'. Unset b.p. with no reaction at wellhead. P.O.H. TIH open ended w/72 std. and 1 single to 4571'. S.D.F.N.

12/18/82: Continue in hole with 2 3/8" tubing. Tag sand at 5952', 132' above top Mesa Verde perf. R.U. Western Co. and clean out sand from 5952' to production packer at 6370'. Pulled tubing to 5820' and rig up to flow through tubing. Pump nitrogen down annulus but did not have enough to bring well aroung. Pressure annulus to 1200 psi. Tubing gasing slightly. Not unloading after 2 hrs. Left open to atm. overnight.

12/19/82: Ck. well dead. Csg. press. 100 psi. R.U. Western and pmp. Nitrogen down tbg. to unload annulus. After annulus unloaded, switched N_2 to annulus and unload tbg. with max annular press. 1950 psi. Left tbg. open to atm.

12/20/82: Check well dead. Released 1,000 psi. from annulus and TIH with 2 3/8" tbg. to tag sand at 6178'. R.U. Western Nitrogen and clean out sand 6178 to pkr. at 6370'. Blow hole clear, pulled 9 stds. to 5820'. Allowed well to flow up annulus for 1 1/2 hrs., no flow last 45 mins. R.U. Western to pump down tbg. and unload water from annulus. Flow well out tbg, 1 hr. gassing slightly but no fluid. Pump N_2 down tbg. and unload annulus. Switch to flow out tbg. and pump N_2 down casing. Flow started out tubing with 1100 psi. on casing. Unloaded at low nitrogen rate for 30 min. Well flowed 25 min. and died. S.D.F.N.

12/21/82: Bled off 150 psi. fr. tbg. and 100 psi. from annulus to atmosphere. TIH w/2 3/8" tbg. to tag sand fill at 6158'. R.U. Western Nitrogen and cleaned out sand fill from 6158' to top of pkr. at 6370'. Circulated hole clean on bottom 45 min. S.D. Bled off tbg. RD Western and POOH w/tbg. Laying dn. our first 20 jts. out of hole. PU 2 3/8" notched clooar w/2" 55N on top of collar and TIH w/collar, S.N. Followed by 184 jts. 2 3/8" tbg. Landed tbg. open ended at 5791'. N.U. Dual tree w/M.V. side to pit. SI tree. RD Action W.S. Rig #3.

12/22/82: RD Action Rig #3 and rig up Action Swab Co. Ck. csg. press. at 325 psi. tgb. press. at 450 psi. Initial fluid level 2800'. Swab 7 hrs. Rec. est. 63 bbl. gas cut water with some oil on top of first run. Final swab rate 9 bbl./hr. final fluid level scattered, final csg. press. 400 psi. Dropped soap stick down tubing. S.I. for night.

12/23/82: Ck. 14 hr. SI csg. press. at 550 psi. tbg. press. at 375 psi. Initial fluid level at 3500'. No fluid unloaded when tbg. open to atmosphere. Swab for 4 1/2 hrs. and shut-down for weather. Recoverd 48 bbl. gas cut oil and water. Final fluid level scattered.

12/24/82 - 12/26/82: Shut down for Christmas.

12/27/82: Ck. csg. press. at 900 psi. Open tbg. to atmoshpere. Unloaded oil and gas for 10 min. and died. R.U. to swab. Dropped two soap sticks down tbg. Swab well 3 times with initial fluid level at 2400'. Well kicked off, flowed 2 1/2 hrs. and died. Recovered fluid was 43% oil cut. Swabbed 2 times and well kicked off with strong blow. Casing pressure began to fall. Left well flowing to atmosphere overnight.

12/28/82: Tubing gassing but not flowing. R.D. Action Swab Co. closed well in.

12/29/82: Ck. 24 hr. Shut-in casing pressure at 800 psi. Open tbg. to atmosphere with strong gas blow for 5 min. and died. No fluid unloaded with tbg. Open for 30 min. Open csg. to atmosphere. Blew down in 40 min., then continued to gas. R.U. Action Well Service Rig. Install b.o.p. Ran 11 jts. 2 3/8" tubing to tag sand at 6139'. RU Western Nitrogen. Clean out sand 6139 to packer at 6370' (231 fill). P.O.H. Laydown 9 jts.

12/30/82: Open casing to atmosphere and blew down in 20 min. with no fluid to surface. Picked up 2 1/16" production tube, 1 jt. 2 1/16" IJ 3.25 lb. tbg., Baker 0.75' x 1.50" seating nipple with expendable check valve, 55 jts. 2 1/16" tubing, Baker seal assembly and 133 jts. 2 1/16" tubing. With joint #189 in elevators, tubing parted dropping 188 jts. and above assembly in hole. Total length of fish 5798.41'. Waited on fishing tools. Ran in hole with overshot, jars, and bumper sub on 2 3/8" tubing. Tag fish at 316' and picked up with no jar action. Inspection

of collar showed threads stripped off near top, indicating that joint was not properly made-up. Pull 10 stds. 2 1/16, having to lay down one bent joint. S.D.F.N.

12/31/82: Open csg. to atmosphere with small blow and continual gassing. P.O.H. with damaged 2 1/16" tubing and layed down 173 jts., leaving 93 (2926') good joints on loc. TIH with notched collar and seating nipple on 2 3/8" tubing. Tag sand with 97 stds. at 6098'. Clean sand w/nitrogen from 6098' to pkr. at 6370'. Pulled 8 stds. to 5877'. RU tubing to flow to pit and blew hole clear w/nitrogen. Open tbg. to atmosphere and left open. SDFWE.

12/31/82 - 01/03/82: Shut down for New Year.

01/04/83: Tubing dead. Open casing to atmosphere unload strong fluid mist for 45 min. Unload 165 jts. 2 1/16" tubing. TIH with 2 3/8" tubing to tag sand at 6100'. R.U. Western Nitrogen and clean out sand from 6100' to packer at 6370'. P.O.H. PU production tub, 1 jt. 2 1/16" tubing, seating nipple with expendable check valve, 53 jts. 2 1/16", seal assembly for model "D" packer and 78 jts. 2 1/16" tbg. S.D.F.N. Left well open to atmosphere.

01/05/83: Continue in hole with 2 1/16" tbg. Tag sand fill at 6111'. Rig had trouble with stripper rubber and elevators. Three joints damaged, not leaving enough tubing to land string. Called for 20 jts. 2 1/16" tubing. Tripped 2 1/16" tubing to seal assembly to verify joint count. Tag sand at 6111' and cleaned out ot 6252'. Pulled 10 stds. to 5622. Left annulus open. S.D.F.N.

01/06/83: Lower 2 1/16" tubing and tag sand at 6100'. R.U. Western Nitrogen and clean out sand from 6100' to packer at 6370'. Knocked plug out of packer and continued in hole to land 2 1/16" production tubing for the Dakota-Gallup interval as follows:

1 jt. 2 1/16/" 10 RD. EUE IJ	32.38'
1 sub	3.00'
200 jts. 2 1/16	6331.08'
Seal assembly for Model "D"	3.30'
53 jts. 2 1/16	1677.09'
Baker seating nipple 1.50" id.	0.75'
1 jt. 2 1/16	32.38'
Production tube	5.00'
	8084.99'

Tubing landed at 8095 w/seat nipple at 8057'. Tubing landed in Model "D" packer with 10,000 lb. compression.

Total 2 1/16" tubing in hole 255 jts. + 1 - 3' sub.

Ran tubing for Mesa Verde interval as follows:

191 jts. 2 3/8" EUE 8 rd. 4.7 lb. tubing	6003.14
Standard seating nipple	1.10
1 jt. 2 3/8"	32.50
Perforated production tub w/closed end	5.00
	6041.74

Total 2 3/8" tubing in hole, 192 jts. Tubing landed at 6052' with seating nipple at 6014'.

Installed Christmas tree. Pump 30 bbl. KCL water down 2 1/16" tubing to expand check valve in seating nipple. Pumped nitrogen down Mesa Verde tubing to unload fluid from annulus. Shut both sides in. Job Complete.

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FARMINGTON, NEW MEXICO 87499

ELLIOTT OIL CO.
ORA #2
1750' FNL & 2000' FEL
21-25N-3W
Rio Arriba, NM
Workover Report

July 9 1984 Move in Farmington Well Service Rig No. 21. Receive 40 joints. Used 2 3/8 EUE from Joe Elledge yard and 32 new joints 2 3/8 EUE from Rig Equipment. Blew down Mesa Verde side to atmosphere and open Dakota-Gallup to flow to tank. Did not catch plunger when it tripped. Closed in for night.

Est. Daily cost - $3787

July 10, 1984 Open Dakota-Gallup tubing to atmosphere. Caught plunger in lubricator. Rig up OTIS and ran paraffin knife to 3500' with no restrictions. Ran bumper spring overshot to 6400' where it bagan to drag. Drag continued to 5000'. Decided not to attempt recovery of spring for fear of not being able to release. Killed Dakota-Gallup tubing with 20 bbl KCL water. Installed B.O.P and flow lines. Lower 2 3/8" tubing and tag up at 6232'. Strap out of hole 2 3/8" tubing. Strap showed total depth at 6234'. Ran tubing in hole open ended. Rig up Western nitrogen and pump truck. Use foam to clean sand from 6234' to liner top at 6263'. Pump 130 bbl water behind foam to kill well. Left annulus open to atmosphere.

Est. Daily cost - $6247

Cumulative - $10,034

July 11, 1984 Lower 2 3/8" tubing to 6263' with no restrictions. Pull tubing out of hole. Remove hanger from 2 1/16" tubing. Rig up Homco wireline truck. Ran free point tool and found free at 6261'. Ran chemical cutter and made cut at 6264'. Cutting tool hung in tubing, worked free in 2 hours. Pulled and layed down 198 joints 2 1/16" tubing. Cut was clean. Closed in for night.

Est . Daily cost - $7086

Cumulative - $17,120

July 12, 1984 Pick up mill shoe, 3 joints wash pipe, jars, and 6-3 1/8" o.d drill collars and ran on 2 7/8" EUE tubing.. Tag fill at 6260' and commenced to wash over 2.1/16" tubing using foam to circulate. Western had trouble keeping foam going and switched to straight nitrogen to clean out last joint. Tagged packer at 6377' and circulated hole clean with foam. Load hole with 130 bbls KCL water. Pull tools to 5880'. Shut down for night.

Est. Daily cost - $19,187

Cumulative - $36,307

July 13, 1984 Lower wash pipe over fish and circulate with foam to packer at 6377'. Kill well with 130 bbls KCL water. Pull out of hole and lay down wash pipe. Run in hole with 2 1/16" overshot, jars, bumper sub, 6-3 1/8" drill collars, acclerator sub and 2 3/8" tubing. Latch on to 2 1/16" tubing at 6280'. Pulled free with 45,000 lb. total pull. Pulled out of hole and layed down 57 joints 2 1/16" I.J. tubing. Shut down for night.

Est. Daily cost - $8786

Cumulative - $45,093

July 14, 1984 Trip in hole with mill shoe, packer retriever, jars, bumper sub, 6-3 1/8" drill collars on 2 3/8" tubing. Rig up power swivel and Western Co. foam equipment. Drilled on model "D" packer at 6377' for 3½ hours. Packer came free and started to pull out of liner when packer hung. Worked packer up hole requiring 1½ hours to pull out of liner. Killed well with 50 bbls KCL water. Pulled out of hole, recovered packer mandrel. Closed in for Sunday.

Est. Daily Cost - $16,419

Cumulative - $61,512

July 16, 1984 Open casing to atmosphere with strong gas blow for 45 min. Pick up Halliburton bridge plug and RTTS packer with seating nipple on top with 2 3/8" EUE tubing. Set plug at 3712', plulled 1 joint. and set RTTS. Attempt to pressure test plug with no success. Retrieve plug and pulled out of hole. Pick up new bridge plug and run in hole. Set plug at 3712' and pressure test to 1000psi. Pull packer up hole and set at 3586' to straddle OJO Alamo squeeze hole at 3650'. Rig up to swab. Swab tubing two times and well swabbed down. Pressure test down tubing to 700psi, held ok. Release packer and bridge plug. Lower tubing and set plug at 6160'. Test to 1000psi, held ok. Raise packer and set at 6058' to straddle Mesa Verde perforations 6084' to 6116'. Rig up to swab tubing. Well kicked off after two swab runs and flowed 1 hour. Swabbed 1 additional time with initial fluid at 4500' and well commenced flowing. Left well open to atmosphere. Shut down for night.

Est. Daily cost - $5232

Cumulative - $66,744

July 17, 1984 Well flowed intermidently during the evening. Rig up to swab. Could not determine fluid level on ititial run. Swabbed 6 times in 4 hours recovered ½ bbl gas cut water per hour. Retrieve bridge plug and lower to 6255'. Tested plug, held ok. Raise packer to 6150'. Rig up to swab. Found initial fluid level at 3600'. Swabbed well 4 times and swabbed dry. Closed in for night.

Est. Daily Cost - $2967

Cumulative - $69,711

July 18, 1984 Check 14 hour shut-in tubing pressure at 900psi. Open tubing to atmosphere, unload oil and water with gas. Died after 30 min. Released packer and retrieved bridge plug. Pulled tubing out of hole and lay down packer and bridge plug. Run tubing open ended, tag plug back at 8152'. (lowest perf 8172') Strapped tubing out of hole to check total depth. Ran tubing to 7303'. Shut down for night.

Est. Daily cost - $3091

Cumulative - $72,802

July 19, 1984 Lower tubing and rig up Western Co. nitrogen and pump truck. Tag sand at 8152' clean out with foam to plug back at 8191'. Kill well with 50 bbls KCL water. Pulled tubing out of hole. Picked up bottom hole pumping assembly and ran in hole on 2 3/8" tubing. Ran 257 joints and attempted to set anchor with no success. Pumped 20 bbls KCL water down tubing and anchor moved more easily. Pulled 1 joint of tubing and were able to set with some difficulty, obtain 5000lb tension on anchor. Production tubing landed as follows:

KB	10.00	
253 joints 2 3/8" EUE 8 round	7965.06	
Baker tubing anchor	3.10	at 7975'
2 joints 2 3/8" EUE 8 round	62.78	
Seating nipple	1.10	at 8041'
Perforated sub	4.10	
1 joint 2 3/8" with bull plug	31.58	at 8078'
TOTAL	8077.72	

Total joints in hole 256. Tension on tubing anchor 5000 lb. Installed wellhead bonnett and shut down for night.

Est. Daily cost - $7845

Cumulative - $80,647

July 20, 1984 Rig up to run pump and rods. Picked up an Axelson 2" X 1¼" X 20' BHD rod pump. Attached a 10' gas anchor on bottom. Checked pump action. OK. Ran pump and rods in hole as follows: Pump followed by 230-3/4" X 25' rods, topped off with 89-7/8" X 25' rods. Total (319) Landed pump in seating nipple at 8041'. Spaced out at surface with 1-6' X 7/8" sub. Loaded tubing with 2% KCL water. Pressure tested tubing to 350psi. Held ok. Checked pump action once again. OK. Clamped polish rod and hung pump 18" off bottom to await pump jack. Cleaned up will head & pumping T. Drained frac tank. Hauled all tubing. Rigged down and released Farmington Well Service. Job Complete.

Note: Left on location: 2 joints 2 3/8" tubing
5 new 7/8" X 25' Rods

Est. Daily cost - $2600

Accumulative - $83,247.00

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FARMINGTON, NEW MEXICO 87499

Elliott Oil Co
ORA #2
1750' FNL & 2000' FEL
21-25N-3W
Rio Arriba Co., NM

Workover Report

August 8, 1984 Kill pump jack. Open tubing and casing to atmosphere. Blew down in 1 hour. Rig up Farmington Well Service. Unseat pump. Pulled rods and pump. Release tubing anchor, installed bop. Pulled tubing out of hole (256 joints). Run in hole with Halliburton 7" RTTS and "B.V." bridge plug. Set plug at 6061' and hung packer free at 6030'. Load hole down tubing with KCL water. Pressure test casing to 1000psi. Held constant 15 minutes. Closed in for night.

Est. Daily Cost: $6,652
Cum Cost: $6,652

August 9, 1984 Check tubing and casing dead and loaded with water. Lower tubing and retrieve bridge plug with some difficulity. Pulled out of hole with 192 joints 2 3/8" EUE tubing, 7" RTTS packer and 7" bridge plug. Pick up 4 1/2" "B.V." bridge plug, 4 joints 2 3/8" tubing, 7" RTTS packer with seating nipple and ran in hole with 203 joints (total). Set 4 1/2 b.p. @ 6401 and 7" RTTS at 6263'. Pressure tubing to 1000psi, held steady 45 min. Raise packer and set at 5835. Swab well with initial fluid level at 3000'. Swab tubing 12 times. Final fluid level scattered. Estimated recovery rate 5 bbls/hour. Recovery fluid was gas out water with trace of oil. Left tubing open to atmosphere. Shut down for night.

Est. Daily Cost: $6,426
Cum Cost: $13,078

August 10, 1984 On arrival at location well was gassing and had obviously been unloading during the evening. Ran swab and found initial fluid level scattered. Swabbed 27 times in 11 hours. Estimated final recovery rate: 1 bbl/hour, 95% water with 5% oil and moderate gas show. Left tubing open to atmosphere for night.

Est Daily Cost: $3,056
Cum Cost: $ 16,134

August 11, 1984 Tubing gassing with no indication that fluid had unloaded during the evening. Initial swab run had scattered fluid level and recovered 1 bbls oil and 3 bbls water. Swabbed tubing 9 times with final fluid entry rate at an estimated 1 bbls per hour. Lower packer to 6171'. Swabbed tubing dry in 5 runs. Waited 1 hour and made 2 additional runs with no fluid recovery and small gas show. Closed in tubing and casing for weekend.

Est Daily Cost: $2,770
Cum Cost: $18,904

August 13, 1984 Check 39 1/2 hour shut-in tubing pressure at 790 psi, casing pressure at 300 psi. Open casing to atmosphere with no tubing reaction. Open tubing to atmosphere with 2 bbl oil unloaded after initial gas blow. Swab tubing 1 time and recovered 1/2 bbl oil and 1 bbl water. Lower tubing to retrieve 4 1/2" bridge plug at 6401'. Pumped 10 bbl KCL water down tubing to help get on plug. Retrieved plug with some difficulty. Pulled packer and plug out of hole. Ran 7" "SV EZ Drill" plug on 2 3/8" tubing. Set plug at 6158. Had difficulity getting tool to shear. Sheared at 70,000lb and pulled setting tool out of hole. Run 7" RTTS packer on 2 3/8" tubing. Set packer at 6148'. Pressure tubing to 1000psi lost 300 psi in 15 min. Pulled 10 stands. Shut down for night.

Est Daily Cost: $6,041
Cum Cost: $24,945

August 14, 1984 Pull tubing out of hole and lay down 7" packer. Run 7" "SV EZ Drill" cement retainer on 2 3/8" tubing and set at 5959'. Load hole with fresh water. Pressure test tubing to 2500psi. Pressure annulus to 1000psi. Establish rate down tubing at 3 1/2 bpm and 950 psi. Instant shut-in pressure 200psi, decreasing to Ø psi in 2 min. Squeeze cement down tubing with 25 sacks class "B" + 2% CaCl2 + 0.8% Halad-9.* Maximum pressure 900 psi at 3 bpm. Slowed rate to 1/4 bpm with 3 bbl displacement remaining, pressure decreased to 200 psi. Pulled out of retainer with 1 1/2 blls displacement remaining. Pulled 15 stands tubing. Shut down for night.
*followed by 50 sacks Class "B" +0.8% Halad-9.
Est Daily Cost: $6,975
Cum Cost: $31,920

August 15, 1984 Lower tubing and sting into retainer at 5959'. Pressure test tubing to 1000psi with no bleed off. Pull tubing out of hole. Run in hole with 6 1/8" bit, bit sub, 6 - 3 1/8" X 1 1/2" drill collars and change over sub on 2 3/8" tubing. Tag cement retainer at 5959'. Rig up power swivel and commence drilling with reverse circulation. Drilled retainer in 4 hours. Push retainer to 6026' and drill on debris. Pulled 2 joints tubing and closed-in for night.

Est. Daily Cost: $6,156
Cum Cost: $38,076

August 16, 1984 Drill on cement retainer debris for 7 1/2 hours, making 4' to 6030'. Returns were fine metal and ground cement cuttings. Bit continually plugged. Pulled tubing, drill collars and bit. Found bit plugged with metal from retainer. Damaged bit trying to remove metal. Ran in hole with new Hughes bit and 6 - 3 1/8" drill collars on 2 3/8" tubing. Run bit to 5 stands off t.d. Shut in for night.

Est Daily Cost: $ 3,106
Cum Cost: $41,182

August 17, 1984 Drill cement 6030' to 6133'. Tag bridge plug at 6159'. Circulate hole clean. Test casing to 1000psi, had steady leak to Ø psi in 5 min. Pulled out of hole. Ran Halliburton 7" RTTS packer on 2 3/8" tubing. Set packer at 5961'. Pressure annulus to 1000 psi, held ok. Commence swabbing with initial fluid level at surface. Swabbed tubing 9 times with final fluid entry rate at 2 bbl/hour. Lost swab jars and mandrel on 10th run. Left well open to atmosphere for night.

Est. Daily Cost: $4,082
Cum Cost: $45,264

August 18, 1984 Found tubing gassing slightly. Install new jars and mandrel, commence swabbing. Check initial fluid level at 4400'. Swabbed well 4 times and swabbed dry. Waited 1 hour and recovered 1 bbl water. Waited 1 additional hour and swab 1 1/2 bbl water. Unseat packer with difficulity having to load tubing to equalize hydrostatic pressure. Pump into squeeze perforations down annulus at 1000psi and very low rate. Pressure fell to zero psi in 5 min. Pulled tubing and packer out of hole. Recovered jars and mandrel on top of seating nipple. Run packer on 2 3/8" tubing to 5961'. Pressure annulus to 1000psi. Halliburton established injection rate down tubing at 2 bpm and 1200 psi. Cement with 50 sack Class "B" with 0.8% Halad-9. Displace cement at 2 bpm and 500 psi until cement started to enter perforations when pressure increased to 900 psi. Slowly decreased rate until tubing pressure would hold 400 psi with no bleed-off. Left 3 bbl cement slurry in casing. Released packer and pulled out of hole. Closed in for weekend.

Est Daily Cost: $7,157
Cum Cost: $52,421

August 20, 1984 Pick up 6 additional drill collars. Run in hole with 6 1/4" bit 12-3 1/8" drill collars on 2 3/8" tubing. Tag cement at 6024'. Drill cement with reverse circulation from 6024' to 6100' and stringers with cuttings to plug at 6159'. Circulate hole clean. Pressure test casing to 1000psi, held steady 30 min. Pulled tubing, drill collars and bit out of hole. Ran 7" RTTS packer at 5961'. Packer would not hold pressure when pressure testing annulus, showing communication to tubing. After numerous attempts to set packer at various depths, pulled out of hole. Run in hole with new 7" RTTS. Set packer at 5961'. Packer would not prevent communication to tubing or annulus when pressure tested. Pulled 1 stand and tested with same results. Closed in for night.

Est Daily Cost: $4,799
Cum Cost: $57,220

August 21, 1984 Drop standing valve in tubing. Waited 1 hour and tested tubing with communication to annulus. Pulled out of hole, found wood chip preventing standing valve from seating. Ran new 7" RTTS on 2 3/8" tubing to 3352'. Pressure annulus with communication to tubing. Dropped standing valve and established communication from tubing to annulus. Pressure tubing and held pressure. Ran 1 stand and tested tubing, held ok. Set packer and pressure tested annulus with communication to tubing. Pulled out of hole with packer. Ran in hole with Baker 7" Retrievematic packer. Set packer at 5961' and pressure annulus to 750 psi, held ok. Swabbed tubing dry in 7 runs. Waited 1 hour and made 8th run with no fluid recovery. Closed in for night.

Est Daily Cost: $2,999
Cum Cost: $ 60,219

August 22, 1984 Swab tubing 1 time with no fluid to surface. Unseat packer and pull out of hole. Run in hole with 6 1/4" bit and 12-3 1/8" drill collars on 2 3/8" tubing. Rig up Halliburton nitrogen, and unloaded water above plug at 6158'. Drilled on plug with foam using conventional circulation for 4 1/2 hours. Circulate hole clean. Continue in hole to liner top @ 6270'. Drilled on debris at 6270' for 30 min with no torque. Circulate hole clean. Pulled 5 joints tubing. Shut-in for nihgt.

Est Daily Cost: $8,829
Cum Cost: $68,248

August 23, 1984 Open tubing and casing to atmosphere, blew down in 15 minutes with no fluid to surface. Pulled out of hole. Ran in hole with 3 7/8" bit and 12-3/18" drill collars on 2 3/8" tubing. Drilled on bridge plug debris 5 hours making 15" penetration. Remainder of plug appears to be spinning on top of liner at 6270'. Pulled 2 stands. Left casing open to atmosphere for night.

Est Daily Cost: $10,141
Cum Cost: $78,389

August 24, 1984 Pulled out of hole with tubing, drill collars and 3 7/8" bit. Rig up Baker sand line drill and run in hole on sand line. Drilled on plug debris for 5 hours. Broke through debris and pulled out of hole to find swab rod of sand line drill badly bent. Pick up 3 7/8" bit with 12-3 1/8" drill collars and ran on 2 3/8" tubing. Tag liner top at 6270'. Rig up Halliburton foam and circulate hole. Worked into liner with little trouble. Continue in hole and tagged up at 8140'. (p.b.t.d.=8191'). Circulate with foam. Could not penetrate past 8140'. Circulate hole clean. Pulled 3 stands. Left casing open for night.

Est Daily Cost: $12,026
Cum Cost: $90,415

August 25, 1984 Drill with foam 8140' to 8155' (15') with little trouble. Found obstruction at 8155'. Drilled for 1 hour with no progress. Pulled out of hole. Checked strap at correct depth. Run in hole with new 3 7/8" bit, 12-3 1/8" drill collars on 2 3/8" tubing. Drill at 8155' for 20 minutes and clean out to 8191' (p.b.t.d.) with no restrictions. Circulate hole clean. Pulled tubing out of hole and layed down drill collars. Found bit had two cones missing. Left casing open to atmosphere.

Est Daily Cost: $16,765
Cum Cost: $107,180

August 27, 1984 Picked up perforated sub, seating nipple and tubing anchor on 2 3/8" tubing. Ran in hole and attempted to set anchor at 8034' with no success. Pulled tubing to find sand and one small piece of metal lodged in anchor. Ran tubing with anchor 29 joints up in the string to be above Gallup perforations 7244-7494'. Landed tubing in well head as follows:

11'	KB
7172.60	228 joints 2 3/8" EUE tubing
3.10	Baker tubing anchor @ 7184'
887.83	28 joints 2 3/8" EUE tubing
1.10	seating nipple @ 8075'
4.10	perforated sub
31.40	2 3/8" bull plugged mud anchor @ 8111'

Set tubing anchor with 10,000lb tension. Total joints in hole=257. Ran 2" X 1 1/4" X 12' X 15' X 8' RHBC Axelson pump with Axite plunger on 230-3/4" and 90-7/8" rods with 6' and 8' subs. Seated pump and pressure tested tubing to 400 psi. Checked pump action ok with rig. Hung well on. Released Farmington Well Service. Job Complete.

Est Daily Cost: $3,899
Cum Cost: $111,079

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE Sept. 27, 1984

RE: Proposed MC _____
Proposed DHC X
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated Sept. 26, 1984

for the Elliott Oil Co. Ora #2 G-21-25N-3W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Frank T. Chavez