

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
SF-080000-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
1 Simmons E
A.B. Geren No. 5

9. API Well No.

10. Field and Pool, or Exploratory Area

Basin Fruitland Cont Blanco MV

11. County or Parish, State
San Juan, NM

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil ☒ Gas ☐ Other

2. Name of Operator

D.J. Simmons Company

3. Address and Telephone No.

3005 Northridge Drive, Farmington, NM 87401

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

790' / N - 1550' / E 26-29N-9W

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Abandonment

☐ Change of Plans

☐ Recompletion

☐ New Construction

☐ Subsequent Report

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut-Off

☐ Final Abandonment Notice

☐ Altering Casing

☐ Conversion to Injection

☒ Other Shut off water

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.)*

Propose to repair well as per attached procedure.

RECEIVED
JUL - 5 1995
OIL CON. DIV.
DIST. 3

RECEIVED
JUL 21 2 10 PM '95
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed

Title Consulting Engineer

Date

6/19/95

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

APPROVED

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.

*See Instruction on Reverse Side

NMOCD

DISTRICT MANAGER

DISCUSSION

The Simmons E-1, is a Mesa Verde open hole completion drilled by D. J. Simmons Company in 1952. The well is located at 790' FNL x 1550' FEL, Section 26, T29N, R9W, San Juan County New Mexico. Diagram 1 details the wellbore geometry of the well. Of primary interest, note that 7", 23 ppf, casing was set to 3960' (bore hole diameter 8 3/4"). The casing was cemented with 300 sks. Calculations indicate that the maximum top of the cement in the 7" casing by 8 3/4" hole annulus is 1664 ft, assuming no shrinkage or lost returns. In all likelihood, the cement top is much deeper. Usually, current day primary cement job calculations utilize a 50% excess factor to cover lost returns and shrinkage. Below the casing the Mesa Verde was drilled with a 6 1/4" hole to 4848', and completed by 1952 open hole methods. The top of the Ojo Alamo, a known water producing zone is 1330 ft, well above the possible top of the cement in this well bore.

In 1990, D. J. Simmons company drilled the A. B. Geren No. 5, on the same well pad as the Simmons E-1. The A. B. Geren No. 5 is a Fruitland Coal well located at 872' FNL x 1490' FEL, Section 26. The distance between the center lines of the two well bores is 101.64 ft, assuming no down hole deviation in either well. 4 1/2", 10.5 ppf casing was run and cemented at 2449'. The Fruitland Coal sections were perforated from 2178 - 85, 2286 - 2300, 2310 - 15, and 2361 - 76 at 4 jsfp. The coals were fractured with 55,000 lbs of sand and 71,400 gals of gelled water.

The A. B. Geren No. 5 produced significant amounts of water. Efforts to "de-water" the coal section, by compression and pumping, were not successful. Production records from offset coal wells indicate that "de-watering" should have been successful. In June of 1992, D. J. Simmons Company, ran a CBL log and tested the producing coal sections to attempt to determine the zones of water entry in the well. The top set of perforations 2178 -2185, were squeezed with 515 sks of cement. The bottom perforations 2361 - 2376, were treated with 500 gals of 15% HCL. Pump and rods were re-ran and the well was returned to production. Produced water volumes did not diminish.

By reviewing the operational data, D. J. Simmons Company engineers, and On Site Technologies consulting engineers have determined that it is probable that the original fracture treatment performed in the coal sections of the A. B. Geren No. 5, created a fracture that intersected the well bore of the Simmons E-1, and connected the uncemented Ojo Alamo zone to the open perforations in the A. B. Geren No. 5. This possibility is supported by the unabated water production in the A. B. Geren No. 5 when compared to the water production of offset coal wells. Workover and squeeze operations on the A. B. Geren No. 5 have proven to be unsuccessful in shutting off the water.

To correct the situation, D. J. Simmons Company proposes to workover the Simmons E-1 well. It is desirable to prepare the E-1 for a Mesa Verde side track designed to penetrate the producing Mesa Verde intervals at some distance from the original open hole completion. During the course of the side track preparation, secondary squeeze cementing operations would be conducted, insuring that the existing 7" casing is cemented to the surface. Special efforts would be made to squeeze off the Ojo Alamo, and any other potential water production zones. These secondary cementing operations should produce a two-fold advantage in preparing the E-1 for sidetrack, and squeezing off the water producing sections that the fracture treatment of the A. B. Geren No. 5 probably intersected.

After secondary cementing operations are completed in the E-1, the A. B. Geren No. 5 will be retested to determine the success of the water shut off. If this is not successful, plugging and abandonment procedures for the A. B. Geren No. 5 will be prepared. If the operations are successful, the A. B. Geren No. 5 will be returned to production.

Simmons E-1
740 ENLX 1550 FEL SEC 26

RECEIVED
BLM

A.B. Green No. 5
872 ENLX 1490 FEL SEC 26

150' SURFACE CSG
45/8, 32 PPF
Cmt w/ 150 sks

8 3/4" dia hole
7" 23 PPF CSG
calc. top of cmt
1664'
(No excess, 100%)

3960'

Open hole
Nitro Shot
Completion
TD 4848'

Ojo Alamo 1330'

Fruitland Coals 2178
P.C. 2364'
Lewis 2455'

Cliff house 4040
Menefer 4150
Point Lookout 4595
Manios 4760

101.64'

230'

4 1/2, 10.5 PPF

SURFACE CSG
85/8, 32 PPF

Stage collar
1630
void
-2010

2449'

DIAGRAM 1

R. Griffee
On Site Technologies LTA
6/19/95

50 SHEETS
100 SHEETS
200 SHEETS



WORKOVER PROCEDURE

Simmons E-1

1. Construct blow down pit. Install and/or test rig anchors. Blow well down.
2. Move in and rig up workover rig. Set pump and pit. Nipple down well head and nipple up 3000 psi BOPE. NU stripping head. Lay blow down line to pit. Blow well down, kill well with water if required.
3. Pull on 2 3/8" tubing. If tubing is stuck, jet cut tubing below 7" casing shoe at approximately 3960 ft. POOH with tubing laying down, SLM.
4. PU 7" casing scraper and SN with wireline retrievable plug in nipple. PU new string of 2 3/8" tubing. RIH with 2 3/8" tbg to casing shoe at 3960'. Pressure test tbg to 1000 psi with rig pump. Retrieve plug on wireline. POOH with tubing, lay down SN and scraper.
5. PU 7" cmt retainer. RIH to 3940' on 2 3/8" tbg. Set retainer. Pressure test tbg to 1000 psi. Sting out of retainer. Load casing with water. Attempt to pressure test casing above retainer to 500 psi. Sting into retainer. RU Western Company. Establish injection rate under retainer into Mesa Verde open hole. Squeeze open hole with 150 sks Class 'b' neat. Sting out of retainer and spot 10 sks on top of retainer. Reverse circulate tbg. TOH with 2 3/8 tbg, lay down stinger.
6. If the casing successfully pressure tested in step 5, go to step 7. PU 7" test packer. Isolate all 7" casing leaks below 1400'. Squeeze leaks as required.
7. RU wireline. Run CBL to determine top of cement and that no stringers exist above 1400'. Perforate two squeeze holes at 1400'. RIH with tubing and test packer, set packer at 1300'. Pressure test tubing casing annulus above 1300'. If annulus does not pressure test, move up hole testing backside to find depth of 7" casing integrity. Establish injection rate down tubing, through squeeze holes, up 7" x 8 3/4" annulus, and through Braden Head. POOH with packer and tubing.

PU 7" cmt retainer. RIH and set at 1350', or depth of casing integrity found above. Squeeze annulus covering Ojo Alamo with 250 sks Class 'b' neat, cement to surface (50% excess). Sting out of retainer and spot 5 sks of cmt on retainer. Reverse circulate tubing. POOH. Adjust procedure as required depending on where casing integrity is discovered. WOC over night.
8. PU 6 1/4" bit. Drill out retainer and clean out to 3900' +/- . POOH. Run 7" casing scraper to clean out depth. POOH.
9. PU 7" CIBP. RIH to 3000' and set CIBP. Spot 25 sks Class 'b' neat on top of CIBP for kick off plug. POOH. ND BOPE, NU wellhead.

WORKOVER PROCEDURE AND COST ESTIMATE

Simmons E-1

1. Construct blow down pit. Install and/or test rig anchors. Blow well down.

Dirt Work; \$350

Mo Te; \$500

Consulting Time, 4 hrs @ \$55/hr = \$220

Sub Total; \$1070

Operational Day 1 (11 hours)

2. Move in and rig up workover rig. Set pump and pit. Nipple down well head and nipple up 3000 psi BOPE. NU stripping head. Lay blow down line to pit. Blow well down, kill well with water if required.

Rig; \$170/hr x 4 hrs = \$680

expendable; \$100

Consulting; \$400/day x 1 day, + mileage = \$500

Water Truck = \$300

Sub Total; \$1580

3. Pull on 2 3/8" tubing. If tubing is stuck, jet cut tubing below 7" casing shoe at approximately 3960 ft. POOH with tubing laying down, SLM.

Rig; \$170/hr x 3 hrs = \$510

Jet Cut; \$1700

Sub Total; \$2210

4. PU 7" casing scraper and SN with wireline retrievable plug in nipple. PU new string of 2 3/8" tubing. RIH with 2 3/8" tbg to casing shoe at 3960'. Pressure test tbg to 1000 psi with rig pump. Retrieve plug on wireline. POOH with tubing, lay down SN and scraper.

Scraper; \$300

Wireline plug \$ SN; \$200

Tubing; \$10,530

Trucking; \$500

Rig; \$170/hr x 4 hrs = \$680

Sub Total; \$12,210

Operational Day 2 (11 hours)

5. PU 7" cmt retainer. RIH to 3940' on 2 3/8" tbg. Set retainer. Pressure test tbg to 1000 psi. Sting out of retainer. Load casing with water. Attempt to pressure test casing above retainer to 500 psi. Sting into retainer. RU Western Company. Establish injection rate under retainer into Mesa Verde open hole. Squeeze open hole with 150 sks Class 'b' neat. Sting out of retainer and spot 10 sks on top of retainer. Reverse circulate tbg. TOH with 2 3/8 tbg, lay down stinger.

Rig; \$170/ hr x 5 hrs = \$850

7" Retainer; \$900

Water; \$250

Western Co.; \$1500

Consulting; 1 day x \$400/day + mileage = \$500

Sub Total; \$4000

Operational Day 3 (11 hours)

6. If the casing successfully pressure tested in step 5, go to step 7. PU 7" test packer. Isolate all 7" casing leaks below 1400'. Squeeze leaks as required.
Rig; (6+ 11) hrs x \$170/hr = \$2890
Water; \$250
Western Co.; \$2000
Consulting; 1 day x \$400/day + mileage = \$500
Sub Total; \$5640

Operational Day 4 (8 hrs)

7. RU wireline. Run CBL to determine top of cement and that no stringers exist above 1400'. Perforate two squeeze holes at 1400'. RIH with tubing and test packer, set packer at 1300'. Pressure test tubing casing annulus above 1300'. If annulus does not pressure test, move up hole testing backside to find depth of 7" casing integrity. Establish injection rate down tubing, through squeeze holes, up 7" x 8 3/4" annulus, and through Braden Head. POOH with packer and tubing.
CBL, Perforating; \$2350
Water; \$250
Packer; \$800
Rig; \$170/hr x 5 hrs = \$850
Consulting; 1 day x \$400/day + mileage = \$500

PU 7" cmt retainer. RIH and set at 1350', or depth of casing integrity found above. Squeeze annulus covering Ojo Alamo with 250 sks Class 'b' neat cement to surface (50% excess). Sting out of retainer and spot 5 sks of cmt on retainer. Reverse circulate tubing. POOH. Adjust procedure as required depending on where casing integrity is discovered. WOC over night.

Retainer; \$900
Western Co; \$2300
Water; \$250
Rig; \$170/hr x 3 hrs = \$510
Sub Total \$8710

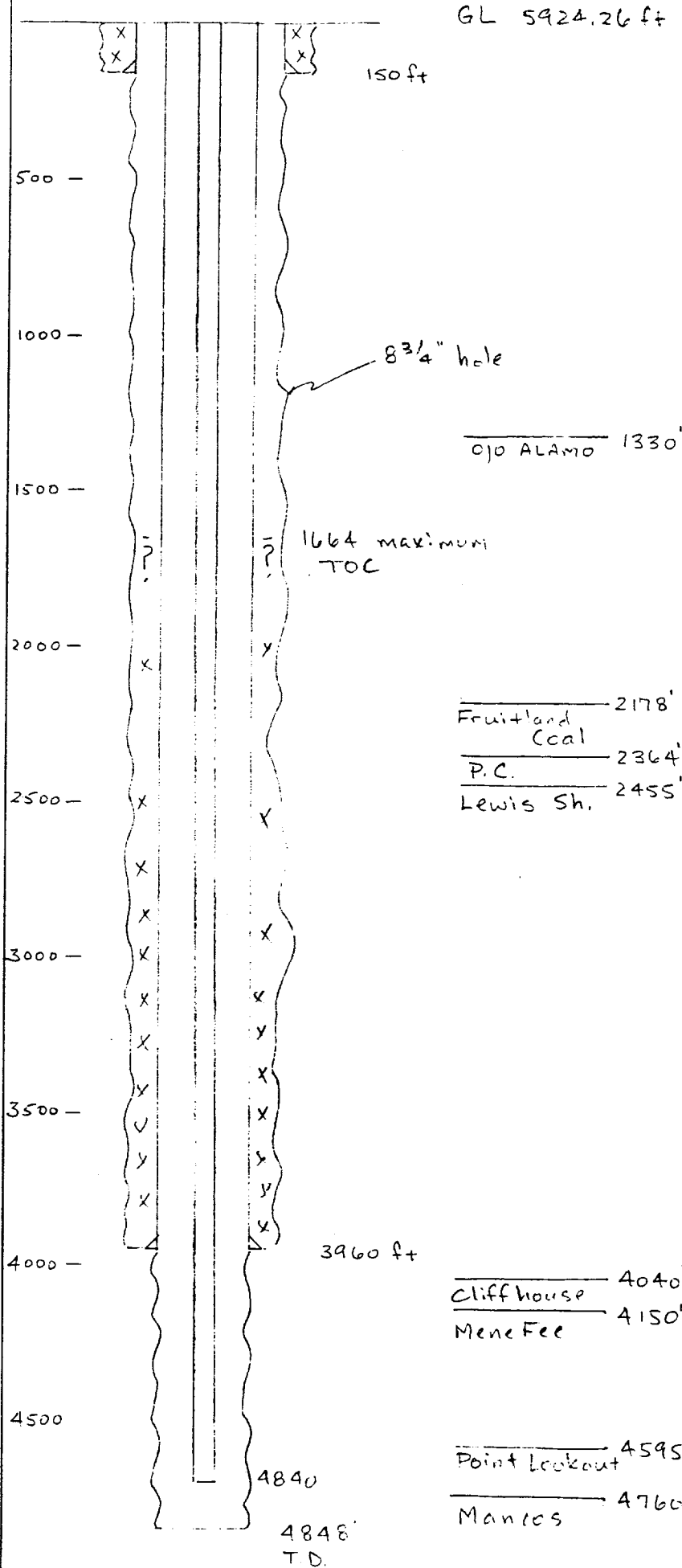
Operational Day 5 (11 hours)

8. PU 6 1/4" bit. Drill out retainer and clean out to 3900' +/- . Pressure test casing to 500 psi POOH. Run 7" casing scraper to clean out depth. POOH.
Bit; \$400
Rig; \$170/hr x 5 hrs = \$850
Consulting; 1 day x \$400/day + mileage = \$500
Sub Total; \$1750
9. PU 7" CIBP. RIH to 3000' and set CIBP. Spot 25 sks Class 'b' neat on top of CIBP for kick off plug. POOH. ND BOPE, NU wellhead. Release Rig.
CIBP; \$900
Western Co.; \$1500
Rig; \$170/hr x 6 hrs = \$1020
Sub Total; \$3420

Cost Estimate Summary

Step	Intangible	Tangible	Total
1.	1,070	0	1,070
2.	1,580	0	1,580
3.	2,210	0	2,210
4.	1,680	10,530	12,210
5.	4,000	0	4,000
6.	5,640	0	9,640
7.	8,710	0	8,710
8.	1,750	0	1,750
9.	3,420	0	3,420
Total	30,060	10,530	40,590

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS



4 5/8" 32 ppf Surface
CSG 50 sks

7" 23 ppf Casing
300 sks

SIMMONS E-1
790' FNL x 1550' FEL
Section 26
T29N R4W
San Juan County
NM
Blanco MV

completed
12/16/52

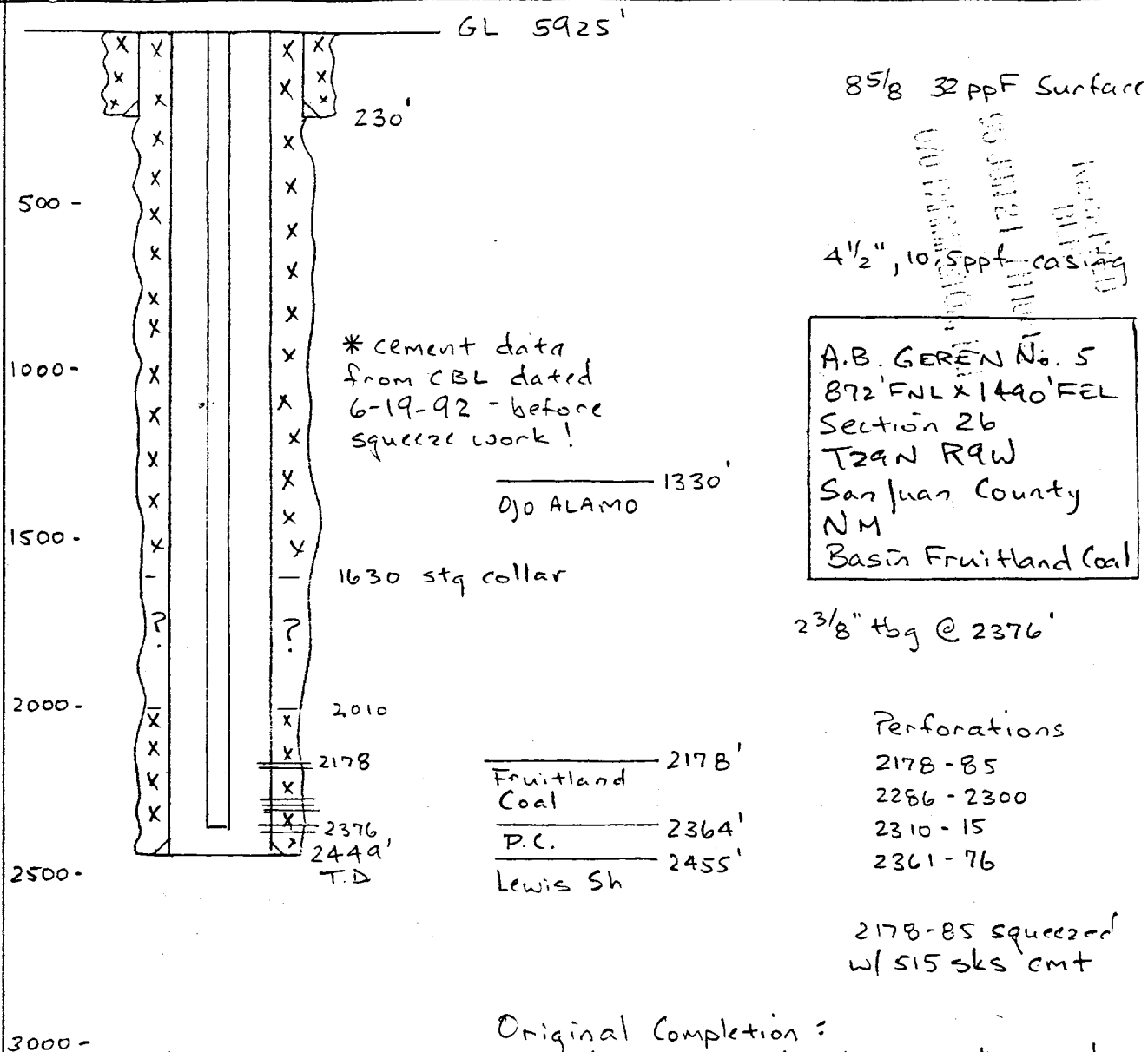
2 3/8 4.7 ppf Hbg
@ 4840'

RECEIVED
BLM
95 JUN 21 AM 10:47
GEO EXAMINATIONS, INC.

Open hole Nitro
Shot Completion

R. Griffree
On Site Technologies Ltd
6/19/95

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS



R. Griffice
OnSite Technologies Ltd
6/19/85