

FILE NOTATIONS

Entered in NID File ✓
Location Map Pinned ✓
Card Indexed ✓

Checked by Chief *PMB*
Approval Letter *9-12-68*
Disapproval Letter ✓

COMPLETION DATA:

Date Well Completed *2-8-69*
OW..... WW..... TA.....
GW..... OS..... PA..... ✓

Location Inspected
Bond released
State or Fee Land ✓

LOGS FILED

Driller's Log..... ✓
Electric Logs (No.) *7*.....
E..... L..... Dual I Lat..... ✓ GR-N..... Micro.....
MC Sonic GR..... Lat..... Mi-L..... Sonic.....
BLog..... CCLog..... Others.....

*Neutron Porosity
Cement Bond
Formation Density*

*LWP
5-9-90*

Send copies of Well Log & monthly
Report of Operation Nelson & Max We
Consulting Engineers 624 No 2 West S. H. C.
328-0368 - phone if the well is to be held Conf.

These people are interested in ^{fresh} new water
for Green River - Get samples to obtain
quality of water. Understand that water
was hit at 1000'.

1-23-69

Department being kept advised as to operations. JWB

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
U-0144299
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Skyline Oil ✓

9. WELL NO.
Toledo #1

10. FIELD AND POOL, OR WILDCAT AND SURVEY OR AREA
NEW FIELD Wildcat ✓

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NE. NW. Sec. 33, T. 20S., R 14E., SLM *Profit*

12. COUNTY OR PARISH 13. STATE
EMERY Grant County Utah

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
Toledo Mining Company (Formerly West Toledo Mines Co.)

3. ADDRESS OF OPERATOR
322 Newhouse Building, Salt Lake City, Utah 84111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface **NE. NW. Section 33, T. 20S., R 14E., SLM**
 At proposed prod. zone **1985' fr W-line + 648' from N-line of Sec 33 NE NENW**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
About 10 miles west of GreenRiver, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
600 ft.

16. NO. OF ACRES IN LEASE
640 acres

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
None

19. PROPOSED DEPTH
7000' *Minimum*

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4610 Grd. 4622 K.B.

22. APPROX. DATE WORK WILL START*
Sept. 10, 1968 ✓

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
XXXX 12 1/2 <i>7 7/8</i>	8 5/8 ✓	24# ✓	250' ✓	150 sks. ✓

It is planned to drill a well at the above location to test the oil and gas possibilities of the Mississippian formation and all of the other formations from the surface down to the Mississippian. The well will be drilled with rotary tools, using air as a circulating medium for as long as possible. The well will be drilled to a depth of approx. 7000', to the Mississippian formation or to commercial production, whichever is the lesser depth. The well will be thoroughly logged and supervised for all possible shows, and these shows will be tested. In the event of production, 5 1/2 casing will be set and cemented. A blow-out preventer will be installed on top of the 8 5/8 surface casing to permit control of the well at all times.

43-015-30003

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 *H. Don Gugley* TITLE *Consulting Geologist* DATE *Sept 9, 1968*
 (This space for Federal or State office use)

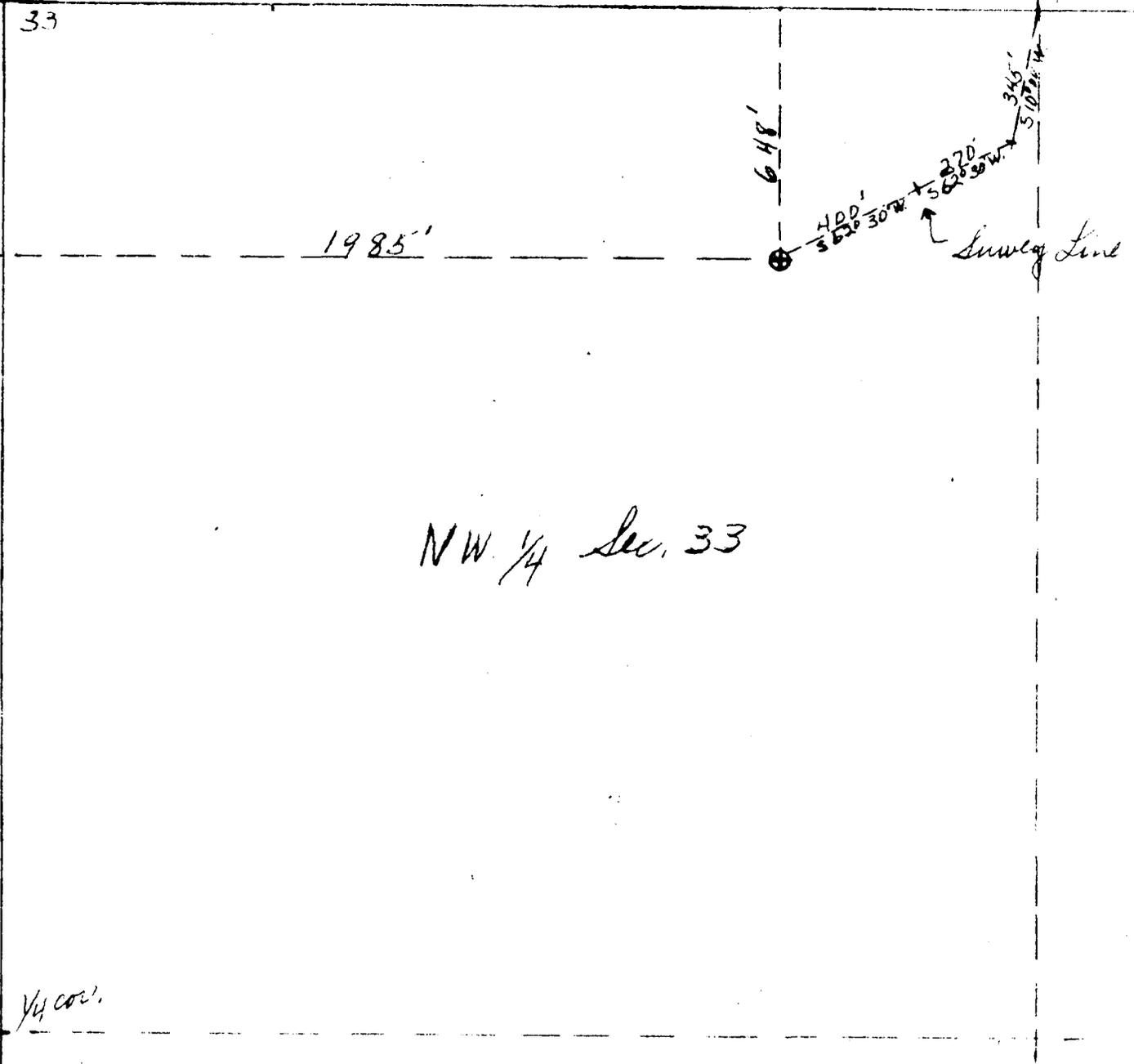
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

Location Plat
for

Toledo #1 Shell
NE. NW. SEC. 33, T. 20S, R. 14E,
Emery County, Utah
Elev. 4610 *ft.*

29 | 28'
32 | 33



NW 1/4 Sec. 33

Scale: 1 in. = 400 ft.
Surveyed By: H. Don Guigley

September 12, 1968

Toledo Mining Company
322 Newhouse Building
Salt Lake City, Utah 84111

Re: Well No. Toledo Federal #1,
Sec. 33, T. 20 S., R. 14 E.,
Emery County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted. However, this approval is conditional upon a surveyor's plat being furnished this office in accordance with Rule C-4(a), General Rules and Regulations and Rules of Practice and Procedure, State of Utah, Division of Oil and Gas Conservation.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL, Chief Petroleum Engineer
HOME: 277-2890 - Salt Lake City, Utah
OFFICE: 328-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGC-8-X, Report of Water Encountered During Drilling, which is to be completed whether or not water sands (aquifers) are encountered while drilling. Your cooperation with respect to completing this form will be greatly appreciated.

Toledo Mining Company

September 12, 1934

-2-

The API number assigned to this well is 43-015-30003 (see Bulletin D12 published by the American Petroleum Institute).

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sc

cc: U. S. Geological Survey
Rodney Smith, District Engineer
8416 Federal Building
Salt Lake City, Utah

Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah, 84111

November 1, 1968

Toledo Mining Company
322 Newhouse Building
Salt Lake City, Utah 84111

Gentlemen:

A recent visit to the drilling location of your well #1, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 20 S., R. 14 E., lease Utah 0144299, Emery County, Utah, revealed that your reserve pit was made by constructing a dike across the dry stream bed by the well. This pit is not acceptable and you are requested to reconstruct the pit so that any water flowing down the stream bed will be diverted around the pit and so that the pit will not be destroyed in the event of a flash flood.

You are requested to make the necessary changes in the pit as soon as possible. A copy of this letter is being sent to the contractor, Mr. Willard Pease. Please contact us if you have any questions concerning the above.

Sincerely yours,

(ORIG. SCD.) R. A. SMITH

Rodney A. Smith,
District Engineer

cc: Willard Pease
Box 548
Grand Junction, Colo. 81501

Utah O&G Com. ✓

Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah 84111

November 29, 1968

Toledo Mining Company
322 Newhouse Building
Salt Lake City, Utah 84111

Attention: Mr. Don Quigley, Consulting Geologist

Gentlemen:

We have been informed that the Bureau of Land Management is interested in the possibility of converting your well #1, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 20 S., R. 14 E., lease Utah 0144299, Emery County, Utah, to a water well should the well be completed as a dry hole or failure or if the well is abandoned at some future date.

As you know, on wells which encounter water of a satisfactory quality, the operator may be requested to plug the well back in such a manner so that it could be used for water production in lieu of plugging all the way to the surface. This office will request and recommend approval of conversion of oil and gas tests only in cases where we are assured that the water quality is satisfactory for beneficial use and where casing has been run at least near to the top of the water producing zone. In addition, we must also be assured that all porous or fluid productive intervals are isolated from each other so that no commingling or contamination may occur. Accordingly, we request that you submit all information available regarding the quantity and quality of waters encountered and the formations, depths and thickness of all water productive zones so that if you decide to abandon the well at some future date we will have sufficient information upon which to base our recommendations.

Your cooperation in this matter will be appreciated and please contact us if you have any questions concerning the above.

Sincerely yours,

(ORIG. SCD.) F. A. SALWEROWICZ

Frank A. Salwerowicz
Acting District Engineer

✓State O & G Commission
cc: BLM District Manager, Price

Casper

✓File

Hold

FAS:cr

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

State PT

5. LEASE DESIGNATION AND SERIAL NO.

U-0144299

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Skyline Oil

9. WELL NO.

Toledo #1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

**NE.NW., Sec 33, T. 20 S.,
R. 14 E., S.L.M.**

12. COUNTY OR PARISH 13. STATE

Emery Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

Toledo Mining Company

3. ADDRESS OF OPERATOR

322 Newhouse Building, Salt Lake City, Utah 84111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface

**NE.NW., Sec. 33, T. 20 S., R. 14 E., S.L.M.
1985' fr. W-line and 648' fr. N-line, Sec. 33**

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4610' grd., 4622 K.B.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

17. 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 depths for all markers and zones pertinent to this work.)*

The well was drilled to a depth of 7558' which was 228' into the Mississippian formation. Casing (4 1/2") was set to properly test the Mississippian. Salt water was recovered. It is therefore planned to abandon well in the following manner:

- A. Set bridge plug in casing at about 7000' or belo free point. Run free point and shut off casing above and pull casing.
- B. Install 30 sk cement plug across top of shot off casing.
- C. Install 30 sk cement plug 5600' to 5750', across top of salt section.
- D. Install 20 sk cement plug 3650' to 3550', across top of Kaibab formation.
- E. Install 30 sk cement plug 2250-2100', across water zone in Wingate.
- F. Install 20 sk cement plug 1500'-1400', across top of Navajo formation.
- G. Install 20 sk cement plug 800'-900', across top of Entrada formation.
- H. Install 20 sk cement plug at 250'-200', across bottom of surface casing.
- I. Set well marker in a cement plug in top of the surface casing. Clean and level location.

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

SIGNED *W. Ross Gungley* TITLE Consulting Geologist DATE Feb. 25, 1969

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

DRILLING HISTORY
OF
TOLEDO #1 WELL
EMERY COUNTY, UTAH

Operator : Toledo Mining Company
322 Newhouse Building
Salt Lake City, Utah

Contractor : Willard Pease Drilling Company
P. O. Box 548, Grand Junction, Colorado 81501

Location : NE.NW., Sec. 33, T. 20 S., R. 14 E., S.L.M., Emery County,
Utah (1985' from W-line and 648' from N-line).

Elevation : Grd. 4610 feet; K.B. 4622 feet.

Total depth : 7558'

- October 24- - Moving in rig and rigging up.
27, 1968
- October 27 - Spudded in. Drilled rat hole. Drilled 0' to 118' (118').
- October 28 - Drilled 118' to 211' (93'). Reamed hole to 15".
- October 29 - Finished reaming hole down to 211'. Set 202' of 10-3/4" sur-
face casing and cemented with 150 sks cement. Returned to
surface. Waiting on cement.
- October 30 - Blew hole dry and began drilling below surface casing with
7-7/8" bit. Drilled 211' to 402' (191'). Encountered water
at 240'. Water flowing 1" stream. Survey at 391' was 1/2°.
- October 31 - Drilled 402' - 720' (318'). Made round trip at 603' for
Bit #3. Bit #2 made 392 feet (211' to 603') in 19 hours.
Drilled at rate of 21 feet per hour. Survey at 670' was
1/2°. Had to begin soap and water injection. Encountered
top of Summerville at about 425', and top of Curtis at about
690'.
- November 1 - Drilled 720' to 870' (150'). Made rd. trip at 774' for Bit
#4. Bit #3 made 161 feet (603' to 774') in 14 hours. Drilled
at rate of 11 ft/hr. Twisted off at 870'. Came out of hole
and picked up overshot. Bit #4 made 96 feet (774' to 870')
in 6 hours. Drilled at rate of 16 feet/hr. Encountered top
of Entrada formation at 860 feet. Had more water entering
hole.

- November 2 - Drilled 870' to 1036' (166'). Finished fishing and went back in hole with Bit #5. Made rd. trip at 1036' for Bit #6. Bit #5 made 163 feet (870' to 1036') in 10 hours. Drilled at rate of 16 ft/hr. Drilling f.g. to m.g. sandstone with red siltstone and shale breaks in Entrada formation. Encountered more water at 958'.
- November 3 - Drilled 1036' to 1195' (159'). Survey at 1053' was $1\frac{1}{2}^{\circ}$.
- November 4 - Drilled 1195' to 1413' (218'). Made rd trip at 1218' for Bit #7. Bit #6 made 152 feet (1036' to 1218') in 11 hours. Drilled at rate of about 14 ft/hr. Survey at 1301' was $1\frac{1}{2}^{\circ}$. Made rd. trip at 1386' for Bit #8. Bit #7, Reed-YSlG, made 158 feet (1218' to 1386') for $10\frac{1}{2}$ hours. Drilled at rate of 16 ft/hr. Went into top of Carmel at about 1240 feet.
- November 5 - Drilled 1413' to 1915' (502'). Made rd. trip at 1735' Bit #9. Bit #8, Smith-V2, made 349 feet (1386' to 1735') in 14- $\frac{3}{4}$ hrs. Drilled at rate of 23 ft/hr. Survey at 1548' was $1\frac{1}{2}^{\circ}$. Survey at 1730' was $1\frac{3}{4}^{\circ}$. Went into Navajo formation at about 1450'.
- November 6 - Drilled 1915 to 2172' (257'). Made rd. trip at 1951' for Bit #10. Bit #9, Reed-YSlG, made 216 feet (1735' to 1951') in $10\frac{3}{4}$ hrs. Drilled at rate of about 20 ft/hr. Survey at 2170' was 2° . Made rd. trip at 2172' for Bit #11. Bit #10, Smith-C2, made 221 feet (1951' to 2172') in 14- $\frac{1}{4}$ hours. Drilled at rate of $15\frac{1}{2}$ ft/hr. Encountered top of Wingate at about 2060'.
- November 7 - Drilled 2172' to 2269' (97'). Encountered lots of water at about 2260'. Water flowed out 2-inch line for a distance of 80 feet. Flow rate was about 2000 bbl. per day or more. Had to start mixing mud to control water flow. Came out of hole at 2269' and changed bits. Bit #11, Reed-YMG, made 97' (2172' to 2269') in 6 hours. Drilled at rate of 16 ft/hr. Mixed mud. Raised mud wt. to 9.5 and viscosity to 36.
- November 8 - Drilled 2269' to 2464' (195'). Made rd. trip at 2416' for Bit #13. Bit #12 (Reed-YMG) made 147 feet (2269' to 2416') in 12 $\frac{3}{4}$ hrs. Drilled at rate of 11 ft/hr. Survey at 2410' was $2\frac{1}{4}^{\circ}$. Mud wt. at 10.1. Went into Chinle at 2450'. Drilling rate decreased from 11 ft/hr to 4 ft/hr.
- November 9 - Drilled 2464' to 2550' (86'). Made rd. trip at 2468' for Bit #14. Bit #13, HTC-OWC, made 52 feet (2416'-2468') in $8\frac{1}{2}$ hours. Drilled at rate of 6 ft/hr. Drilling in hard dolomitic shales, sdy, lms, and v.f.g. hd. carc. sandstones of Chinle formation. Made rd. trip at 2522' for Bit #15. Bit #14, Reed-YHG, made

54 feet (2468' to 2522') in 10 hours. Drilled at rate of 5 ft/hr.

- November 10 - Drilled 2550' to 2665' (115'). Made rd. trip at 2590' for Bit #16. Bit #15, Reed-YMG, made 68 feet (2522' to 2590') in 15½ hours. Drilled at rate of 4 ft/hr. Survey at 2590' was 1½°.
- November 11 - Drilled 2665' to 2685' (20'). Came out of hole at 268' to replace rotary table. Bit #16, Reed YX1G, made 95 feet (2590' to 2685') in 12½ hours. Drilled at rate of 7 ft/hr. Worked on rotary table and drive line.
- November 12 - Drilled 2685' to 2757' (72'). Worked on rotary table and drive line. Went back in hole with Bit #17. Began drilling at 2:00 A.M. Made rd. trip at 2740' for Bit #18. Bit #17, Reed-YSLG, made 55 feet (2685' to 2740') in 13½ hours. Drilled at rate of 4½ ft/hr. Encountered top of Shinarump formation at 2740'.
- November 13 - Drilled 2757' to 2850' (93'). Made rd. trip at 2806' for Bit #19. Bit #18, Reed-WMG, made 66 feet (2740' to 2806') in 11 3/4 hours. Drilled at rate of 5½ ft/hr. Had good drilling break at 2762' to 2780' in the Shinarump. This was a c.g., congl. ss. w/good porosity and black residual oil saturation. Had good cut and fluor. Survey at 2806' was 3/4°.
- November 14 - Drilled 2850' to 2882' (32'). Made rd trip at 2868' for Bit #20. Bit #19, Smith-L4H, made 62 feet (2806' to 2868') in 15 3/4 hours. Drilled at rate of 4 ft/hr. Went into Moenkopi at 2818' to 2 ft/hr. Started out of hole for Bit #21 at 2882'. Bit #20, Smith-SS4, made 14 feet (2868' to 2882') in 6 hours. Drilled at rate of 2½ ft/hr.
- November 15 - Drilled 2882' to 2982' (100'). Made rd. trip at 2982' for Bit #22. Bit #21, Reed-YHWG, made 100 feet (2882' to 2982') in 17½ hours. Drilled at rate of about 6 ft/hr in Moenkopi red shales and siltstones.
- November 16 - Drilled 2982' to 3109' (127'). Made rd. trip at 3093' for Bit #23. Bit #22, Reed-YHG, made 111 feet (2982' to 3093') in 17½ hours. Drilled at rate of about 7 ft/hr. Survey at 3090' was 1/4°.
- November 17 - Drilled 3109' to 3297' (158'). Made rd trip at 3234' for Bit #24. Bit #23, Reed-YMG, made 141 feet (3093' to 3234') in 18¼ hours. Drilled at rate of about 8 ft/hr.
- November 18 - Drilled 3267' to 3338' (71'). Came out of hole at 3338' to run a drill-stem test of the Shinarump porosity zone. Bit #24, Reed-YS1, made 104 feet (3234' to 3338') in 10½ hours. Drilled

at rate of 10 ft/hr. Ran DST #1 and tested interval 2755' to 2829' between straddle packers. Tool was open for 1 hour and shut-in for 1 hour. Made weak blow which died in 5 min. There was 400 ft of mud in the drill pipe because the first attempt to set the packers failed. Therefore, the test was working against 400 ft of mud cushion. Recovered 400 ft of slightly gas cut mud. Pressures: IHP - 1461#; I.F.P. - 244#; F.F.P. - 248#; F.H.P. - 1440#; F.S.I.P. - 248#. Laid test tool down. Survey at 3335' was 1 3/4°.

- November 19 - Drilled 3338' to 3443' (105'). Went in hole with Bit #25. Had oil show in Sinbad section of Moenkopi. At 3370'-90' an oolitic dolomite with black residual oil was encountered. There was slight fluorescence and cut. Section was tight and dense, however, and no drilling break was observed. Made rd. trip at 3437' for Bit #26. Bit #25, Reed-YS1, made 99 feet (3338' - 3437') in 16½ hours. Drilled at rate of 6 ft/hr.
- November 20 - Drilled 3443' to 3512' (69'). Came out of hole. Bit #26, HTC-OWC, made 75 feet (3437' to 3512') in 11¼ hours. Drilled at rate of 6½ ft/hr. Layed down kelly. Took out rotary table and replaced with repaired table. Survey at 3512' was 2½°.
- November 21 - Drilled 3512' to 3642' (130'). Went back in hole with Bit #27. Started out of hole at 3641' for Bit #28. Bit #27, Smith - C2, made 130 feet (3512' to 3642') in 17 hours). Drilled at rate of about 8 ft/hr. Encountered top of Kaibab at 3587'. Had drilling break from 3587' to 3602'; in sdy dol. and lms., congl. and chty, but no oil shows.
- November 22 - Drilled 3642' to 3691' (49'). Made rd. trip at 3682' for Bit #29. Bit #28, Reed - YMG, made 40 feet (3642' to 3684') in 11 3/4 hours. Drilled at rate of about 3½ ft/hr. Encountered top of Coconino at 3679'. Drilling rate decreased from 3½ ft/hr to 2 ft/hr. Coconino is hard qtztc., vfg.ss.
- November 23 - Drilled 3691' to 3741' (50'). Made rd trip at 3698' for Bit #30. Bit #29, Reed YHWP, made 16 feet (3682' to 3698') in 10 hours. Drilled at rate of 1½ ft/hr. (Real slow drilling.) Went back in hole with a button bit.
- November 24 - Drilled 3741' to 3776' (35'). Made rd. trip at 3763' for Bit #31. Bit #30, Smith - SS4, made 65 feet (3698' to 3763') in 20½ hours. Drilled at rate of about 3 ft/hr.
- November 25 - Drilled 3776' to 3827' (51'). Made rd trip at 3788' for Bit #32. Bit #31, HTC-Rg7j, made 25 ft (3763' to 3788') in 9 hours. Drilled at rate of 3 ft/hr.

- November 26 - Drilled 3827' to 3923' (96'). Made rd. trip at 3827' for Bit #33. Bit #32, HTC - Rg7j, made 39 feet (3788' to 3827') in 11 hours. Drilled at rate of $3\frac{1}{2}$ ft/hr.
- November 27 - Drilled 3923' to 3982' (59'). Made rd trip at 3931' for Bit #34. Bit #33, HTC-X55R, made 104 feet (3827' to 3931') in 24 hours. Drilled at rate of 4 feet/hour.
- November 28 - Drilled 3982' to 4055' (73'). Made rd trip at 3982' for Bit #35. Bit #34, Reed - SC 5g, made 51 feet (3931' to 3982') in 13 hours. Drilled at rate of 4 ft/hr. Had some residual oil showing at 4050' and lost some circulation.
- November 29 - Drilled 4055' to 4102' (47'). Made rd trip at 4082' for Bit #36. Bit #35, HTC-RG1Xj, made 100' (3982' to 4082') in $30\frac{1}{2}$ hours. Drilled at rate of $3\frac{1}{2}$ ft/hr.
- November 30 - Drilled 4102' to 4165' (63'). Made rd trip at 4165' for Bit #37. Bit #36, HTC-RB1XJ, made 83 feet (4082' to 4165') in $28\frac{1}{2}$ hours. Drilled at rate of $3\frac{1}{2}$ ft/hr. Went into Hermosa formation at 4160'. Drilling rate decreased slightly and sucrosic dolomite, rd silty ss. and shale were obtained in the cuttings.
- December 1 - Drilled 4165' to 4239' (74'). Drilling real slow at rate of about 3 ft/hr.
- December 2 - Drilled 4239' to 4302' (63'). Made rd trip at 4252' for Bit #38. Bit #37, HTC - X55R, made 87 feet (4165' to 4252') in 26 hours. Drilled at rate of $3\frac{1}{2}$ feet/hr.
- December 3 - Drilled 4302' to 4355' (53'). Made rd. trip at 4317' for Bit #39. Bit #38, Reed - YHWG, made 65 feet (4252' to 4317') in $18\frac{1}{2}$ hours. Drilled at rate of $3\frac{1}{2}$ ft/hr. Little change in cuttings.
- December 4 - Drilled 4355' to 4413' (58'). Made rd trip at 4367' for Bit #40. Bit #39, Reed-YMG, made 50 feet (4317 to 4367') in $17\frac{1}{2}$ hours. Drilled at rate of 3 ft/hr. No change - lms and dol.
- December 5 - Drilled 4413' to 4462' (49'). Made rd trip at 4423' for Bit #41. Bit #40, Reed-YMG, made 56 feet (4367'-4423') in $15\frac{1}{2}$ hours. Drilled at rate of $3\frac{1}{2}$ ft/hr.
- December 6 - Drilled 4462 to 4533' (71"). Made rd trip at 4462' for Bit #42. Bit #41, Reed-YS1G, made 39 feet (4423' to 4462') in $10\frac{1}{2}$ hours. Drilled at rate of $3\frac{1}{2}$ feet/hr. No change in samples.
- December 7 - Drilled 4533' to 4590' (57'). Made rd. trip at 4547' for Bit #43. Bit #42, HTC - WD7, made 85 feet (4462' to 4547') in $25\frac{1}{2}$ hours. Drilled at rate of $3\frac{1}{2}$ ft/hr.

- December 8 - Drilled 4590' to 4659' (69'). Made rd trip at 4614' for Bit #44. Bit #43, HTC - WD 7, made 67 feet (4547' to 4614') in 19 hours. Drilled at rate of 3½ ft/hr.
- December 9 - Drilled 4659' to 4689' (30'). Made rd trip at 4671' for Bit #45. Bit #44, HTC-WD7, made 57 feet (4614' to 4671') in 16½ hours. Drilled at rate of 3½ ft/hr. Little change in samples --hd. dol. and anhy.
- December 10 - Drilled 4689' to 4762' (73'). Made rd trip at 4741' for Bit #36. Bit #45, HTC - WD 7, made 70 ft (3671 to 4741') in 18 hours. Drilled at rate of nearly 4 ft/hr with 30,000# and 9½# mud. Encountered black to brown sucrosic lms w/oil st. at 4730'.
- December 11 - Drilled 4762 to 4845' (83'). Made rd trip at 4816' for Bit #37. Bit #46, Reed - YHWG, made 75 feet (4741' to 4816') in 20½ hours. Drilled at rate of 3 ¾ ft/hr. in dark brown, petroliferous sucrosic lms.
- December 12 - Drilled 4845' to 4965' (120'). Drilled steady all day at rate of about 5 to 6 ft/hr in Xln. sucrosic lms and anhy.
- December 13 - Drilled 4965' to 5075' (110'). Made rd trip at 5000' for Bit #48. Bit #47, HTC - X 55R, made 184 feet (4816' to 5000') in 35½ hours. Drilled at rate of 5 to 6 ft/hr. Had drilling break at 4975 to 4990' in sugary lms., but no shows.
- December 14 - Drilled 5075' to 5181 (106'). Drilled steady all day at 4 to 5 ft/hr in lms.
- December 15 - Drilled 5181 to 5262' (81'). Drilled steady at a slow rate of 3 to 3½ ft/hr all day.
- December 16 - Drilled 5262' to 5336' (74'). Made rd trip at 5277' for Bit #49. Bit #48, HTC-X55R, made 277 feet (5000' to 5277') in 65 hours. Drilled at an average rate of over 4 ft/hr. Still drilling in brown Xln to sucrosic sdy lms with occasional oil stain. No porosity.
- December 17 - Drilled 5336' to 5466' (130'). Drilled steady all day at rate of 5 to 6 ft/hr in sdy suc lms.
- December 18 - Drilled 5466' to 5520' (54'). Made rd trip at 5520' for Bit #50. Bit #49, Smith - SS5, made 243 feet (5277' to 5520') in 55½ hours. Drilled at average rate of 4½ ft/hr.
- December 19 - Drilled 5520' to 5568' (48'). Made rd trip at 5555' for Bit #51. Bit #50, HTC-WD7, made 35 feet (5520'-55') in 9½ hours. Drilled at rate of about 4 ft/hr.

- December 20 - Drilled 5568' to 5670' (102'). Drilled steady all day at rate of $4\frac{1}{2}$ ft/hr.
- December 21 - Drilled 5670' to 5778' (108'). Went into salt at 5700' and mud viscosity built up to 97 after penetration of 40 feet of the salt section. Waiting on brine water to change mud over to salt base. Mixed salt water mud and continued drilling. Drilling at rate of 16 ft/hr.
- December 22 - Drilled 5778' to 5890' (112'). First salt bed was 134 ft. thick (5700' to 5834'). Made rd trip at 5890' for Bit #52. Bit #51, HTC-X55R, made 335 feet (5555' to 5890') in 66 hrs. Drilled at an average rate of 5 ft/hr; but varied from 2 ft/hr to 16 ft/hr.
- December 23 - Drilled 5890' to 6003' (113'). Drilled most all day in 1st clastic zone which was 157' (5834' to 5991') thick. Topped 2nd salt bed at 5991'.
- December 24 - Drilled 6003' to 6238' (235'). 2nd salt bed was only 39 feet thick (5991' to 6030'); intervening clastic section was 80 feet thick (6030' to 6110'). Top of the 3rd salt bed was at 6110'. Third salt zone was 69 feet thick (6110' to 6179'). The lower clastic zone was 71 feet thick (6179' to 6250').
- December 25 - Drilled 6238' to 6278' (40'). Lower Hermosa was topped at 6250'; at a gry to wh, v. calc., v.f.g. ss/with no shows. Salt section was 550 feet thick.
- December 26 - Drilled 6278' to 6301' (23'). Drilling was very slow - about 1 hr/ft. Made rd trip at 6287' for Bit #53. Bit #52, HTC - X55R, made 397 feet (5890'-6287') in $60\frac{1}{2}$ hours. Drilled at average rate of $6\frac{1}{2}$ ft/hr., but much of this drilling was in the salt section. Lower Hermosa is drilling very slow and hard. Sand beds are quartzitic, very fine and tight. Dolomite is hard and sandy.
- December 27 - Drilled 6301; to 6316' (15'). Drilling very slowly at rate of $1/2$ to 1 ft/hr. Based on samples, it appears that well is running very close, as far the section is concerned, to the Carter Sphinx well to the north.
- December 28 - Drilled 6316' to 6330' (14'). Drilling very slowly - 1 to 2 hrs/ft. Made rd trip at 6328' for Bit #54. Bit #53, HTC-X55R, made 41 feet (6287' to 6328') in 40 hours. Drilled at rate of 1 ft/hr. Sands are still quartzitic. Expect top of Miss. between 7300' and 7400'.
- December 29 - Drilled 6330' to 6342' (12'). Very slow drilling and hard. (2 hrs/ft). Made rd trip at 6342' for Bit #55. Bit #54, HTC-RG1XJ, made 14 feet (6328' to 6342') in 24 hours. Drilled at rate of 1 ft/2 hours.

- December 30 - Drilled 6342' to 6380' (38'). Made rd trip at 6362' for Bit #56. Bit #55, Reed - YHWG, made 20 feet (6342' to 6362') in 9 hours. Drilled at rate of 2 ft/hr.
- December 31 - Drilled 6380' to 6400' (20'). Made rd trip at 6383 for Bit #57. Bit #56 (Reed-YHG) made 21 feet (6362' to 6383') in 9 hours. Drilled at average rate of 2 ft/hr. in cherty dolomite and in hard tan quartzitic sandstone.
- January 1, 1969 - Drilled 6400' to 6436' (36'). Made rd trip at 6415' for Bit #58. Bit #57 (Reed-YHWG) made 32 feet in 20 hours. Drilled at rate of about 1½ ft/hr. No change in formation.
- January 2 - Drilled 6436' to 6461' (25'). Made rd trip at 6444' to put on a Christensen diamond bit, Bit #59. Bit #58 (HTC-WO7) made 29 feet in 16 hours. Drilled at rate of less than 2 ft/hr. Formation and samples unchanged. Lots of quartzitic sand and cherty dol. in samples. Decided to try a diamond bit to eliminate the number of trips and possibly increase the penetration rate.
- January 3 thru 9 - Drilled 6461' to 6770' (309') in 7 days, approximately 44 feet per day which was better than the drilling rate of the tri-cone bits. At 6750' the diamond bit was pulled and checked. The amount of wear was very little and the bit had 75% salvage. Bit #60 (Reed YMG) was run back in hole while waiting on another diamond bit. Samples about the same. A v.f.g. quartzitic, calc., mica. ss. was encountered between 6720' and 6740'. This sand was hard and tight with no shows.
- January 10 - Drilled 6770' to 6800' (30'). Made rd trip at 6789' to change back to a diamond bit. Bit #60 (Reed-YMG) made 39' in 17½ hours. Drilled at rate of 2 ft/hr. More lms. in samples. Put another diamond bit on.
- January 11-12 Drilled 6800' to 6866' (66' in 2 days). Had to make a rd trip at 6863' to unplug bit. Took diamond bit off and put on Bit #62 (HTC-ODV). Much more lms., blk and sucrosic; some dolo. brn., Xln in samples.
- January 13 - Drilled 6866' to 6894' (28'). Drilled slowly at rate of about 2 ft/hr. Made rd trip at 6884' for Bit #63. Bit #62 (HTC-ODV) made 21 feet in 12 hours. Samples about the same.
- January 14 - Drilled 6894' to 6919' (25'). Made rd trip at 6912' to put diamond bit back on (Bit #61). Bit #63 (Reed-YMG) made 28 feet (6884'-6912') in 16 hours, about 1½ ft/hr. Diamond bit began drilling steadily at about 2 ft/hr.
- January 15-18 Drilled 6919' to 7000' (81'). Drilled to 7000' and decided to run logs to determine exact correlation and to estimate top to the Missippian formation. Had to wait 30 hours on Schlumberger.

Ran logs to 6996' - Dual Induction-Laterolog, gamma density and sidewall-neutron logs were run. Found top of lower Hermosa - Pinkerton Trail section at 6250' as had been determined by samples and estimated top of Mississippian would be at about 7350'. Decided to drill ahead to the Mississippian.

- January 19-30 Drilled 7000' to 7351' (351' in 11 days - about 33'/day) with diamond bit. Had a marked reverse drilling break at 7085'; which was a blk. cherty lms. and gray qtz., dol. wh. ss. Encountered top of Molas at about 7160'. Molas contained purple siltstone, blk and rd calc. sh.; chert; gray silty lms.; and gray qtztc. ss. Gear end in pump went out, so had to come out of hole to repair pump.
- January 31 - Drilled 7351' to 7388' (37'). Finished repairing pump and went back in hole with Bit #64 (HTC-W7R2j). Drilled ahead to 7388' and lost circulation - Kelly dropped about 2 feet and mud was gone. Encountered top of Miss. at 7330'. Samples changed to a gry, Xln and silty, lms., and white chalky lms. Pulled 80 stds of drill pipe and began mixing mud and loss-circulation material. Fresh water flow from the Wingate began coming in and filled up hole--must have bridge above loss-circulation zone. Began hauling salt water from Moab to kill fresh water flow.
- February 1-2 Mixing mud with salt water and loss-circulation material to kill fresh water flow. Got water flow killed and started back in hole - 5 stds at a time. Encountered bridge at 6107' and drilled out. Hit second bridge at 6300'; drilled it out and lost circulation. Fresh water flow started again. Began mixing mud and pumped in salt water. Mixed two pits of mud and finally killed salt water flow.
- February 3 - Finally got circulation back and hole cleaned up to bottom, 7388'. Began drilling ahead. Drilled to 7400' and bit locked up. Conditioned mud and came out of hole for new bit. Bit #64 (HTC-W7R2j) made 49 feet (7351' to 7400') plus lots of circulating and drilling back to bottom. Water started flowing while out of hole.
- February 4 - Drilled 7400' to 7444' (44'). Went back in hole with Bit #65 to 2600' and began mixing mud, weight material, salt water, and loss-circulation material to kill water flow. Began drilling ahead at 4 P.M. Drilled at rate of 3 to 10 min/ft in lt brn. Xln. to sdy lms. Had pcs. w/blk. oil stain, lots of crinoid stems, detrital mat., and calcarudite, plus white chalky lms. Good porosity 7390 to 7420'.
- February 5 - Drilled 7444' to 7450' (6'). Decided to run logs at 7450' prior to drill-stem-testing in the event circulation was completely lost again after testing. After logging it was decided

- February 5 (cont'd) to drill ahead for another 100 feet before trying to test. The logs verified the top of the Miss. at 7330'.
- February 6 - Drilled 7450' to 7502' (52'). Made rd trip at 7502' for Bit #67. Bit #65 made 50' (7400' to 7450') in 10½ hours. Bit #66 (HTC-W7) made 52' (7450-7502') in 18½ hours. Drilled at rate of about 3 ft/hr. in brown chty. col. and gray to white xln lms.
- February 7 - Drilled 7502' to 7558' (56'). Drilled to 7558' and decided to come out for DST #2. Encountered white, chalky, vug. lms. w/ppp and sl. oil stain at 7530'. Conditioned mud and circulated samples out before coming out of hole.
- February 8 - Picked up test tool and went back in hole. Tested interval 7530' to 7558' (28'). Tool open for 1 hour. Didn't take shut-in for fear of sticking tool. Had real strong blow immediately and continued to end of test. Recovered 3410 feet of fluid (*180 ft. of drilling mud, 1000 of water cushion, and 2230' of salt water.) Salt water tested 81,000 ppm chlorides. Pressures were I.H.P - 3979#; I.F.P. - 27#; F.F.P. - 1877# and climbing steadily; F.H.P. - 3857#.
- Ran DST #3 and tested interval 7368' to 7518' (150). This test was unsuccessful since the tool plugged with loss-circulation material in 3 minutes. However, tool was open for 1 hr. and 15 min. and shut in for 1½ hours. Chart showed tool plugged and no pressures were obtained. Had real strong blow immediately, which continued for 15 minutes and then gradually decreased to dead in 40 minutes. Recovered 4700 feet of drilling mud. This is quite significant and indicates good formation pressure.
- February 9 - Layed down test tool and went back in hole to condition mud and circulate before water flow started again. Decided to run 4½" casing to test lost circulation zone. Conditioned mud.
- February 10 - Continued circulating and conditioning mud while waiting on casing. Came out of hole laying down drill pipe and drill collars. Ran 233 jts of 4½ casing (1000' of 11.60# on bottom (31 jts) and 201 jts of 10.50# and one land jt of 11.60#.) Cemented with 50 sacks of 50-50 Pozmix "A" cement with 4% gel and gilsonite. Plug down at 9:50 B.M. February 11. Displaced with 118 barrels of fresh water. *Landed casing at 7555' K.B.*
- February 12 - Waiting on cement to cure.
- 13
- February 14 - Rigged up McCullough and ran Neutron-correlation log. Ran bond log and found no cement above 7400' (good bond below 7400'). Had to get cement above lost-circulation zone at 7388' to seal off fresh water flow above from the possible

production zone at 7388'; so perforated casing at 7100' with 4 shots and prepared to recement above the zone. Waited on Halliburton cement trucks.

- February 15 - Pumped in 75 sks of 50-50 Pozmix "A" cement with 4% gel and 2% CaCl₂. Displaced with 100bbls. of fresh water. Squeezed last ten barrels. Pressure built up to 900 lbs. Pressure held at 700# after displacement. Waiting on cement to cure.
- February 16 - Waiting on cement to cure. Picked up 237 jts. of tubing (7442') to drill out cement plug. Encountered cement at 6773'.
- February 17 - Drilled out cement and cleaned out casing to 7472'. Came out of hole with tubing. Ran bond log to check bond above zone (7380'-7400'). Had good bond from 7170' to 6950', so perforated 7388' to 7393' with 1 shot/ft. Unstrung blocks and drill line and spooled on swab line (5/8"). Began swabbing casing. Swabbed out fresh water in casing.
- February 18 -24 Swabbed well alternately. Got swab stuck several times; lost swab once; had several bridges in casing due to loss-circulation material packing in casing. Three of these had to be drilled out, so had to pick up the blocks and resting the drilling line and go back in the hole with the tubing. Fished out the lost swab and began swabbing again. Recovered some oil cut salt water after the mud and loss-circulation material was swabbed out of the zone. Some gas odor on top of each swab. Finally the salt water would stand at 700 feet below the surface and continued swabbing would not lower the fluid. Considerable amounts of crinoid stems, detrital and reef material was found in the swab cups from time to time. Finally decided to cut off the casing and pull it and plug the hole.
- February 25 - Abandoning well. Had McCullough run free-point on casing. Found free-point at 4510'. Set Baker Model P-1 bridge plug at 5600'. Cut casing off at 4500' and pulled the casing. Installed the following cement plugs on the way out of the hole with the casing:
- A. Installed a 30-sk cement plug at 4500'-4350' - across top of shot-off casing.
 - B. Installed a 20-sk cement plug at 3650'-3550' - across top of Kaibab formation.
 - C. Installed a 30-sk cement plug at 2250'-2100' - across water zone in Wingate formation.
 - D. Installed a 20-sk cement plug at 1500'-1400' - across top of Navajo formation.

E. Installed a 20-sk cement plug at 900' - 800' - across top of Entrada formation.

F. Installed a 20-sk cement plug at 250' - 200' - across bottom of surface casing.

Set marker in a cement plug in the top of the surface casing.

H. D. Gingley

1588 West North Temple
Salt Lake City, Utah 84116
328-5771
April 29, 1969

Toledo Mining Company
322 Newhouse Building
Salt Lake City, Utah 84111

Re: Well No. Toledo #1
Sec. 33, T. 20 S, R. 14 E,
Emery County, Utah

Gentlemen:

This letter is to advise you that the "Well Completion or Recompletion Report and Log" and electric and/or radioactivity logs for the above mentioned well are due and have not been filed with this office as required by our rules and regulations.

Please complete the enclosed Forms OGC-3, "Well Completion or Recompletion Report and Log", in duplicate and forward them to this office as soon as possible. If electric and/or radioactivity logs were not run, please make a statement to this effect in order for us to keep our records accurate and complete.

Your cooperation in this matter will be greatly appreciated.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

SHARON CAMERON
RECORDS CLERK

sc

Enclosure: Forms OGC-3

UNITED STATES
DEPARTMENT OF THE INTERIOR



RECEIVED
OIL AND GAS OPERATIONS

MAY 15 1969

GEOLOGICAL SURVEY
SALT LAKE CITY

BUREAU OF LAND MANAGEMENT
District Office
Post Office Drawer AB
Price, Utah 84501

May 13, 1969

Rodney A. Smith, District Engineer
U. S. Department of Interior
Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah 84111

Attention: Mr. Frank A. Salwerowicz

Dear Mr. Smith:

We received the attached letter on May 5, 1969, and examination of this site was made on May 12 to determine the extent of the cleanup. It was found that most of the water had been released from the two reservoirs. The remaining water could be dangerous to the incoming livestock. There was also a muddy sludge in the bottom of each reservoir which could be a trap to livestock wandering into the reservoirs.

It will be necessary for Toledo Mining Company to return to the site immediately and place a tight net fence, three feet high with three barbed wires on top, around the reservoirs. This fence shall remain intact until the reservoirs have dried up and are no longer a hazard to livestock. The fence can then be removed and the reservoirs covered and reseeded to an adaptable grass. The area also needs further cleanup as to mud bags, cans, cable, and other debris accumulated as a result of the oil operation.

The above recommended cleanup will be done under the supervision of Price District Manager for Bureau of Land Management.

Thank you for your cooperation in this matter.

Sincerely yours,

Lorin J. Welker
District Manager

Enclosure

Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah 84111

May 13, 1969

PI
9/1/69

Mr. H. John Rix
Toledo Mining Company
322 Newhouse Building
Salt Lake City, Utah 84111

Dear Mr. Rix:

As discussed with you by Frank Salwerowicz of this office on May 14, the Bureau of Land Management has advised that the condition of the abandoned location of the Toledo Mining well No. 1, NE1/4NW1/4 sec. 33, T. 20 S., R. 14 E., Emery County, on lease Utah 0144299, is still unacceptable and needs immediate work to make the area safe for livestock. I am attaching a copy of a letter from Lorin Welker, District Manager, BLM, Price, Utah, which describes the problems and work needed.

You are requested to contact the Bureau of Land Management in Price and to take the necessary action to eliminate this hazard without delay. If you have any questions on this matter, please contact this office.

Very truly yours,

(ORIG. SGD.) R. A. SMITH

Rodney A. Smith
District Engineer

Attachment

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

PF State

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—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U 0144299	
2. NAME OF OPERATOR Toledo Mining Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR 322 Newhouse Building, Salt Lake City, Utah 84111		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NE.NW., Sec. 33, T. 20 S., R. 14 E., S.L.M. 1985' fr. W-line and 648' fr. N-line, Sec. 33		8. FARM OR LEASE NAME Skyline Oil	
14. PERMIT NO.		9. WELL NO. Toledo #1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4610' grd; 4622' K.B.		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA NE.NW., Sec. 33, T. 20 S., R. 14 E., S.L.M.	
		12. COUNTY OR PARISH Emery	
		13. STATE Utah	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

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

17. 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 depths for all markers and zones pertinent to this work.)*

Subject well has been abandoned in the following manner:

- A. Bridge plug set in 4½" casing at 5600'.
- B. Found free point at 4510'. Casing shot-off at 4500' and pulled.
- C. Installed 30 sk cement plug at 4500'-4350', across top of casing.
- D. Installed 20 sk cement plug at 3650-3550', across top of Kaibab.
- E. Installed 30 sk cement plug at 2250-2100', across water zone in Wingate.
- F. Installed 20 sk cement plug at 1500-1400', across top of Navajo.
- G. Installed 20 sk cement plug at 900'-800', across top of Entrada.
- H. Installed 20 sk cement plug at 250'-200', across bottom of surface casing.
- I. Set well marker in surface casing, cleaned, and levelled location.

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

SIGNED *N. Don Gugley* TITLE Consulting Geologist DATE August 30, 1969

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

sketch

GEOLOGIC SIGNIFICANCE

OF

TOLEDO MINING COMPANY
TOLEDO #1 WELL

W. Don Quigley
Consulting Geologist
Salt Lake City, Utah

August 30, 1969

Geologic Significance
of
Toledo Mining Company
Toledo #1 Well

The subject well, Toledo #1, was drilled on a farmout agreement with Skyline Oil Company of Salt Lake City, who in turn acquired the oil and gas leases on the surrounding lands primarily on the basis of a seismic anomaly which had been outlined by previous seismic work in the area. The seismic anomaly indicated a structural closure against the Little Grand Fault to the south and against a north-south fault to the west of the well location. This closure and structural relationship was not confirmed by previous geophysical work (magnetic) which had been accomplished in the area by the author. The magnetic work suggested that the area was quite flat and would be structurally similar to the Carter-Sphinx well located about six miles north of the subject well. The prospect, however, had merit because of possible reef build-ups in the Mississippian, possible pinch-outs of the salt-clastic zone in the Pennsylvanian against a western shoreline or facies change, possible porous limestones and sandstone beds in the Sinbad member of the Moenkopi, and possible entrapment of hydrocarbons which have been found in the Shinarump formation in other wells in the vicinity.

The surface and relatively shallow formations were encountered at depths reasonably close to the estimated depths. The strength and reliability of the seismic prospect rested primarily on having a very thin or no salt section in the Pennsylvanian Paradox. If this section was approximately the same thickness as was found in the Carter-Sphinx well to the north, then the seismic prospect in the Mississippian, and the pinch-out possibility in the Pennsylvanian would be virtually eliminated. The only thing left then would be the possibility of a reef zone or shoreline facies change in the Mississippian.

When the top of the salt evaporite section was encountered at 5700 feet and continued to 6250 feet, it was quite evident that the original objective and reason for drilling the well had been lost. This salt-section was nearly identical with the Carter-Sphinx well to the north and, therefore, established that their locations with respect to the shoreline of the Paradox sea were quite similar and that the depth to the top of the Mississippian should be about 7350', or approximately the same interval thickness as the Carter-Sphinx well. This would mean that the subject well would be about 1200 feet higher than the Sphinx well which was the amount of the regional dip; thus, the structural advantage previously anticipated was probably not present. However, the decision was made to continue drilling to the Mississippian, on the chance of finding a reef zone or perhaps having a trap based on regional dip alone.

Drilling was extremely slow and costly. Diamond bits were used to improve penetration rates and to decrease the number of trips. Tri-cone insert bits would drill 30 to 40 feet and last about 17 hours. The diamond bits would last ten days or more and would drill about 50 feet per day. Drilling rates were often as low as one foot per hour. The lower Hermosa was extremely hard quartzitic, and dolomitized. The limestones were cherty and silicified and the shales were dolomitized.

The top of the Molas was found at 7166' and the Mississippian was topped at 7330'. At 7388' circulation was lost and all of the mud in the hole disappeared; thus indicating a very porous zone in the Mississippian at this depth. Later samples showed the zone to be a reef zone composed of crinoid stems, detrital material, calcirudite, and shells of all descriptions, thus definitely establishing a very porous reef zone. The zone was about 14 feet thick (7384' to 7398') and was found to contain salt water with a show of gas and oil after casing had been set. The Mississippian also had additional porosity from 7402' to 7416' in sandy-granular and vugular limestone with oolites and crinoids. Further porosity was obtained in the zone 7540' to 7558' which was white, chalky limestone with pin-point porosity with evident oil stain. This zone was tested and 3400' of salt water was recovered in one hour.

The formations, their tops and thicknesses, as identified from study of the samples and electric logs which were found in the Toledo #1 well are as follows:

<u>Formation</u>	<u>Depth to Top</u>	<u>Thickness</u>
Morrison	Surface	430'
Summerville	430'	265'
Curtis	695'	170'
Entrada	865'	315'
Carmel	1180'	255'
Navajo	1435'	515'
Kayenta	1950'	55'
Wingate	2005'	445'
Chinle	2450'	270'
Shinarump	2720'	70'
Moenkopi	2790'	540'
Sinbad	3330'	255'
Kaibab	3585'	115'
Coconino	3700'	435'
Cutter-Rico	4135'	145'
Hermosa - Upper	4280'	1420'
Salt Section	5700'	550'
Lower (Pinkerton Trail)	6250'	916'
Molas	7166'	164'
Mississippian	7330'	228' (T.D.)
Total Depth	7558'	---

Three drill stem tests were taken in the subject well. Two were in the Mississippian and one was in the Shinarump formation. These tests and results were as follows:

D.S.T. #1 - Test of the Shinarump

Date: November 18, 1968

Interval: 2755' to 2829' (74')

Tool open: 1 hour.

Shut in: 1 hour.

Blow: Weak blow - dead in 5 minutes under 400' of mud cushion.

Recovery: 400 feet of slightly gas cut mud.

Pressures: I.H.P. = 1461# S.I.P. = 240#
 I.F.P. = 244# F.H.P. = 1440#
 F.F.P. = 248#

Remarks: Flow static against mud cushion which was trapped in tool when first setting of straddle packers failed. Tested between straddle packers.

D.S.T. #2 - Test of lower Mississippian porosity.

Date: February 8, 1969

Interval: 7530' to 7558' (28')

Tool open: 1 hour.

Shut in: No shut-in taken for fear of sticking.

Blow: Strong blow immediate and continued to end of test.

Recovery: 3600 feet of fluid; 200 feet of drilling mud and 3400 feet of salt water (clear).

Pressures: I.H.P. = 3979# S.I.P. = None taken.
 I.F.P. = 27# F.H.P. = 3857#
 F.F.P. = 1877# and rising.

Remarks: Recovered salt water, was clear, and tested 8100 ppm chlorides with resistance of 0.02 ohms. Flow pressure was steadily climbing at end of flow period.

D.S.T. #3 - Test of Mississippian reef zone.

Date: February 8, 1969

Interval: 7368' to 7518' (150')

Tool open: 1 hour 15 minutes

Tool closed: 1 hour 30 minutes

Blow: Real strong blow immediate and continuing for 15 minutes and then decreasing gradually to weak. Dead in 40 minutes.

Recovery: 4700' of drilling mud.

Pressures: I.H.P. = 3903# S.I.P. = 3253#
 I.F.P. = 2454# F.H.P. = 3774#
 F.F.P. = 3251#

Remarks: Straddle Packers were used on test. Chart showed tool plugged in 3 minutes. All the mud (4700') came back out of formation in the 3 minutes, indicating excellent pressure and porosity.

The Shinarump had some residual oil shows (black oil) plus staining so it was deemed advisable to test it to determine if there was any free oil or gas. The test showed very low pressures and recovered no free oil, and only a small amount of gas in the mud.

The Mississippian had excellent porosity in the reef zone and had some shows of hydrocarbons. Unfortunately, the position of the well was in the salt water saturated portion of the reef and therefore unsuccessful. The discovery of the reef zone was nevertheless extremely important and there should be accumulated hydrocarbons somewhere in the reef in the vicinity. It is possible that a position south of the fault (Little Grand Fault) would be more favorable. Some further detailed geophysical work could undoubtedly provide considerable aid in locating the proper site.

A detailed sample descriptive log is attached hereto. The colors did not reproduce but the descriptions are clearly legible. The formations and lithology were quite normal with the exception of the Mississippian reef zone. As mentioned earlier it was hoped that the salt section in the Hermosa would be very thin or not present at all, but the section was nearly identical to that found in the Carter-Sphinx well to the north. The shoreline of the evaporite sea of Paradox time is therefore farther to the west.

The subject well made an important discovery in the reef zone in the Mississippian. Many companies and geologists have searched and hoped to find such a zone, but none of the wells in this area of the Paradox Basin have had such a zone before. Therefore, the reef should be explored further now that it has been found. However, it is recommended that further detailed geophysical work be accomplished to delineate the extent of the reef and to locate a more favorable site for a test well, if possible. It is also recommended that an intermediate string of casing be set through the fresh water zone in the Wingate, in another well. This water zone caused considerable trouble and expense in the deeper drilling. Wells in the subject area are expensive and drilling rates are very slow; therefore, the best possible location should be chosen and every effort should be made to obtain the best and most data possible prior to the selection of the well site.

W. Don Quigley
W. Don Quigley
Consulting Geologist

Utah State #1

FORM OGC-8-X

FILE IN QUADRUPLICATE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Toledo #1
Operator Toledo Mining Company Address 322 Newhouse Building
Salt Lake City, Utah Phone 322-0417
Contractor Willard Pease Drilling Company Address P. O. Box 548
Grand Junction, Colo. Phone 242-6912
Location NE 1/4 NW 1/4 Sec. 33 T. 20 S. R. 14 E Emery County, Utah

Water Sands:

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
From	To	Flow Rate or Head	Fresh or Salty
1. 230'	240'	1" stream	Fresh
2. 860'	880'	2" stream	Fresh
3. 960'	990'	2" stream	Fresh
4. 2130'	2200'	2000+ bbl/day	Fresh
5.			

(Continue on reverse side if necessary)

Formation Tops:

See Report on well.

H. Now Grigley

Remarks:

- NOTE:
- (a) Upon diminishing supply forms, please inform this office.
 - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See Back of form).
 - (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

Water analysis of water from 2130'-2200' zone was made by town of Green River.

Toledo #1 Well Log

1000' to 2000'

1000

Wh. mg. to cgl loose c/a gtz. ss. w/ add' gms.
 Some gray waxy bent sh., rd. ban. calc. sh.
 Wh. mg. to cgl loose c/a gtz. ss. w/ add' gms.

1100

1200

Dns. c/a. foisted gtz. ss. - (no loose gms)

Jca?

Rd silt.

1300

some gray, rd. gray waxy sh.
 Rd. ban. calc. ss, silt., sh. & ms.

1400

Wh. foisty c/a gtz. ss & rd. ban. silt. - cgl. & mixed

Jm

some gray gray calc. sh. & rd. sh.
 Cgl. & mixed calc. wh. ss.

1500

OR. to rd. ban. mg. - foisted - gtz. ss - add' gms. w/ thin beds of rd. silt.
 Pyn.

- ✓
- ✓
- ✓
- ✓
- ✓
- ✓

1600

amber gtz. argillan ss - mg. add' gms.

1700

Brick rd. sh. - gray gray sh.
 Sl. calc. rd. ban. to above of gray gray sh.

1800

olive waxy bent sh.
 some amber ss.
 Congl. - dark, black sh. - silt.
 Olive to gray waxy bent sh.

1900

Redish ban. gtz. argillan add' ss w/ mg.
 dk. ban. & gray sil. sh.
 Rd. sh. ban. gtz. argillan add' mg. ss.

2000

JK

KE 5 X 5 TO 1/2 INCH 46 0862 MADE IN U.S.A. KEUFFEL & ESSER CO.

Jk - 2000

Toledo # 1

2000' to 3000'

Rw

3000

2200

2300

2400

Rc

- 2500

2600

2700

Rc

2800

Rm

2900

3000

Pk. dety. shly. - ss.
Choc. bent gny gms

OR TOIT BAN w- sorted nd'd gtz ss.

lt gny bent sh
Ban. top. w- sorted gtz. ss

Or. w- sorted gtz nd'd Ag ss.
Some gny lms - dk gny calc sh.
lt. gny bent sh.
Bent nd. sly sh.
Gny sly sh

lt. gny hcl sly sh.
Rd. gny gny, gny bent sh

Rd. sly - gny sly sh + XIN ANAY, - BAN. ss.
Gny XIN hcl sly lms.
Wh. gyp - nd sly. - gny lms

BAN & wh. sly lms.

Rd. calc. lmy sh.
Wh. to bn gny gtz Ag ss.
Wh. to rd gtz. - c.g. calc ss - rd ank. c.g. ss.

Rd. ank. calc ss.
C.g. wh cong. porous ss w/ blk resid. asphalt - good out of Fluor.

C.g. wh cong. por. ss w/ blk resid asphalt - good out of Fluor.
C.g. SAT. cong. ss - good Fluor & ant.

Rd. pur. calc sly sh. - sly cong. nd-ss.
Deep black at sh
Gamb. gny sh

AX Rd cong. ss - dk gtz pebbles - rd ban calc sly

A Rd calc sly sly sh.

Rd calc sly mica sly sh.

Some pur & gny sly hcl calc sh
Rd calc sly calc sh
Some rd cong. sly sh w/ h

KE 5 X 5 TO 1/2 INCH 46 0862 MADE IN U.S.A. KEUFFEL & ESSER CO.

4000

Coledo #1 Well

4000' to 5000'

4000	Wh. fg. ch. glassy, dol. ss Some wh choky anhy
4000	Wh. fg. ch. glassy gtzic dol ss w/ pyrr. & anhy Some mg to ch. mica gtz - any ss w/ blk resid. oil & cut - loss conc. Wh. topks fg. gtzic dol. ss.
4100	Wh. fg. ch. glassy gtzic dol ss w/ pyrr. Some (cong). gtz & ch. pabs in ss
4200	DK bn sucrosia sdy dol w/ sl. oil st & cut - RESIDTY SS LT bn MOT. ss. LT bn sdy dol. - v. fg. mica dol. ss & ch. sh. Bk. ad mica sdy sist - LT. bn dol. ss & cong. rd. bn. ss.
4200	Bk. ad. sdy mica calc. sist Some wh. fg. to cong. ss. Some dk gray dol. (XIN)
4300	DK bn mica. sdy sist. & sh Some dk gray sucrosia XIN dol. LT. ad. bn. v. calc sist - LT. gray XIN ms of anhy LT. bn. XIN suc. dol. Choky wh. anhy - dol. & sist. LT. gray & LT. bn. ms & dol.
4300	LT. gray dms dol. & ms DK gray dms dol. & ms DK & LT gray dms dol. & ms LT. bn. dms. ms. & dol.
4400	DK gray suc. dol. BLK dol. & gray dol. & LT. gray ms & anhy LT. gray ms. DK & LT gray sugary XIN ms w/ sl. oil st. & cut
4400	LT. gray ms - & anhy Some mica dms fg. calc ss DK gray sdy ms & anhy DK gray sdy schistic ms & dol
4500	DK gray suc. dol. w/ some oil st DK gray sdy. suc. ms & dol Gray silic. ms Gray silic. mica sugary dol. & ms. w/ oil st Some gray ch. sh. - gray silic ms & dol. & gtzic
4600	Vanic. calc mica sh. - ms & dol DK gray sl. pp dol. w/ sl. st. - gray silic dol. DK to LT gray silic dol. w/ some bn. oil st & sl. cut Some wh. anhy Sdy anhy ms. & gray silic. dol. Gray silic. dol. w/ some st. Gray mica & silic. sucrosia dol. Some wh. ch. Red dk bn silic dol. & anhy - petroliceous - w/ st. & sl. cut.
4700	LT. bn. sdy ms & anhy DK gray to bn. silic dol. w/ sl. st. LT. bn. suc. XIN to 2 more ms. (sdy) LT. bn. sdy dms anhy ms. & anhy Some dk bn to gray silic. mica. petro. dol.
4700	DK gray v. mica & silic dol. & ms Bk. mica suc. silic petro. ms - gtz. Some anhy - blk petro. sdy ms Bk. to dk bn. suc. ms. w/ oil st.
4800	Bk. to dk bn. petro. mica suc. ms DK bn. to blk petro. suc. sdy ms - XIN
4900	DK bn. to DK gray suc. silic XIN ms. & anhy Gray to bn. sugary XIN ms. w/ fossils Bk. to gray sugary suc. XIN ms. & anhy
5000	Petro. bn. ms. - suc. & XIN Some sl. bn. to blk XIN suc. ms. & anhy.

KE 5 X 5 TO 1/2 INCH 46 0862
 7 X 10 INCHES MADE IN U.S.A.
 KEUFFEL & ESSER CO.

Legdo # 1 Well

5000' to 6000'

5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000

5000	A	Lt. gray, lt. brown, dk gray & blk, suc, XIN lms - sh petro
	A	Lt tan sugary to dms lms. & anhy & ch.
	A	Lt brown, gray to dk brown blk coarsely XIN suc. chry lms. some sh. on dol. lg - mg ss - gray suc dol.
	A	DK gray & brown dol. - suc XIN
5100	A	Lt. brown suc - granula XIN lms
	A	Chry lt brown to gray to dk brown XIN suc. lms.
	A	Lt. gray to dk gray silic mica lms.
	A	Blk silic carb. lms
	A	Blk silic carb lms - mica.
5200	A	Blk silic carb mica lms
	A	DK & lt gray sdy mica lms & dol. & lots of ch
	A	Lt gray to brown silic lms
	A	Gray & lt brown lms XIN
5300	A	Oil brn XIN sdy lms in dol. st & sl cut
	A	Oil brn & gray sugary XIN suc. lms w/ sl st
	A	Gray dms. earthy lms (ang.)
	A	Gray sdy & slty ang lms
	A	Gray XIN suc. lms & anhy & ch
	A	"
	A	Gray & brown chry lms, & anhy
5400	A	Some oil st.
	A	Gray sdy suc lms & brown suc dol.
	A	Blk ang. lms
	A	Blk ang petro. lms
	A	Blk, sdy coarsely XIN - sdy lms - lots of ch. & (Petro), no floor but good st.
	A	Fossils.
	A	Gray & brown sdy chry lms
5500	A	Sl. oil st (no cut or fluid)
	A	Lt. brown & lt. gray XIN dms. lms & anhy.
	A	Red & gray dol. ang. sh.
	A	Red, gray & purple dol. sh & blk lms - dol. ch. & anhy.
	A	Blk lms. & green blk sh (slaty)
	A	Lots of amber & wh ch. brown & blk lms & dol.
	A	Sam to gray mica XIN lms. chry, rd & gray dol. sh.
	A	Blk. ang lms, & v. calc blk sh & gray bent sh.
5600	A	v. bent
	A	Gray sdy mica lms & wh XIN anhy
	A	Blk ang lms & calc blk sh & anhy
	A	DK gray sdy ang lms
	A	Lt. gray to wh. sdy dms lms.
5700	A	DK gray to blk sdy XIN lms & anhy
	A	Some blk calc sh
Salt		Sdy salt. (No detritals of salt) & some wh calc ss - on grtz fans
		No samples.
5800		Anhy & blk lms & sh
5900		Lt. gray ang sdy lms w/ ppt - minor
		Some blk oil sh. & blk petro. mud & ang lms. & anhy
		Gray mudst - anhy - blk petro sh & brown lms.
		Blk petro sh. & gray ang lms & anhy
		Blk petro & calc mudst & gray to brown ang dms lms.
		wh. anhy
		Lt gray to brown dms lms & anhy
		Blk petro & calc mudst & lms & anhy.
6000		DK gray. ang lms & anhy
		Salt

5 X 5 TO 1/2 INCH 46 0862
 7 X 10 INCHES
 KEUFFEL & ESSER CO.

Caledo # 1 Well

6000' to 7000'

6000
6100
6200
Lo. Hdr.
6300
6400
6500
6600
6700
6800
6900
7000

SALT, but rec. only any. & ms

DK gray. sing. ms & any.
Sdy calc. gnt ms & blk petro. sh & wh. any.

SALT, but rec. only ms & any

DK gray. To how dms any. ms, any & blk petro. calc. mudst.
SOME blk mica dol. sh

blk petro. & carb. sh

A BAN dms and ms. - blk. sh. & ch
BAN to gray sdy ms. - any & blk petro. calc. sh
Gray to wh. v. calc. vfg. ss. - No shows (No fluid, or st.)
SS is near. possible to soft.
Ht wh. chky. any & ban ms.
Ht gray to lt. ban vfg. dol. gtztc ss - near Hdr.

XX
Gray sdy dol. & vfg. dol. ss.
Ht. ban dol. vfg. dol. ss & sdy dol. (gtztc)

Some pk congl. w/ gtz & rd sst pebs.
Ht TAN gtztc dol. ss. & rd sst.

AAA DK gray to ban chky dol.

A Some rd & blk sh
Ht ban v. calc. hd vfg. ss - blk & rd sh.

A TAN calc. vfg. Tgt ss
Rd. blk & gray sh. & sst, calc. ss, & chky dol.

A Gray mica. hd Tgt calc. vfg. ss

A DK gray sdy dol. - No Tgt ss. - any, etc.
Ht. ban to tan v. calc. vfg. Tgt. ss
Some rd & blk sh.
Lots of wh. x'n any.
Calc gray gtztc ss, any & dol.

A

Gray to lt. ban calc. Tgt ss.
Some suc dol. - a possible ozokerite(?)
A Sd. dol. st. & fluid. on vfg. calc. ss.
Gray to ban hd calc. ss. - any & sdy dol.

Gray vfg. calc. ss.
Ht. gray gtztc ss & gray to ban dol. (suc)

SOME blk dol.
SOME PK sst - dol. & x'n any

AA DK gray to blk x'n dol. - SOME blk. rd. & gnt dol. sh, & lots of ch.
A Ht. gray sdy dol. to suc dol., any, & gray sh

A

Blk ch. & dk gray to blk dol. sh
Ht. gray sdy to (suc) dol. & dol. ss.
SOME rd & gnt congl. sh - (v. calc) sdy ms.
BAN calc. v. hd. & vfg. ss
SOME dol. & any
Redd. blk. v. mica, vfg. dol. ss - gtztc

DK gray to blk sdy ms
Ht. gray to calc gtztc vfg. ss.
SOME any & blk ms.

A little rd sh, ss is sdy coarsen.
Blk ms - gray calc. vfg. dol. to gtztc ss.
SOME ban x'n dol.

Gray sdy ms
Blk ms - Ht. gray calc. gtztc vfg. hd. ss

SOME ban x'n dol. & rd sh

v. sdy Ht. gray ss. & ms
SOME rd sst.
Dol.

Dol. rd sst, ms, & calc gtztc ss.
SOME rd & gnt congl. mudst.

KE 5 X 5 TO 1/2 INCH 46 0862
 7 X 10 INCHES
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other In-
structions on
reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

U-0144299

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Skyline Oil

9. WELL NO.

Toledo #1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

N2.NW. Sec. 33, T. 20 S.,
R. 14 E., S.L.M.

12. COUNTY OR PARISH

Emery

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION:
NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR

Toledo Mining Company

3. ADDRESS OF OPERATOR

322 Newhouse Building, Salt Lake City, Utah 84111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUNDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD

Oct. 27, 1963 Feb. 8, 1969

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

7558'

0' to 7558'

None

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual induction, Density, and Sidewall Neutron Logs

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4"		202'	15"	150 sacks	None
4 1/2"	10.50#-11.60#	7555'	7 7/8"	125 sacks 50-50 Pozmix	4500'

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

7388' to 7393' with 1 shot/ft.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

None

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Well History Report and Geologic Report

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

W. Don Gungley

TITLE

Consulting Geologist

DATE

August 30, 1969

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 58, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP TRUE VERT. DEPTH
			See Well History Report.			

SEP 10 1968

March 30, 1970

MEMO FOR FILING

Re: March 24, 1970
Toledo Mining Company
Toledo Federal #1
Sec. 33, T. 20 S., R. 14 E.,
Emery County, Utah

Plugged and abandoned location has been satisfactorily leveled, cleaned, and marked. It is, therefore, recommended that the liability under the bond be released.

PAUL W. BURCHELL
CHIEF PETROLEUM ENGINEER

PWB:jw

cc: U.S. Geological Survey