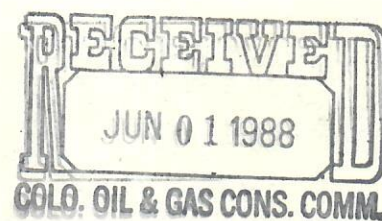




MEDALLION PETROLEUM INCORPORATED  
LAKE ALBERT NO.1-1  
NW SW SEC.1-T17S-R43W  
KIOWA COUNTY, COLORADO

WELLSITE GEOLOGY  
by  
RSAY ENTERPRISES  
RANDY SAY - INDEPENDENT GEOLOGIST  
WHEAT RIDGE, COLORADO



April 29, 1988

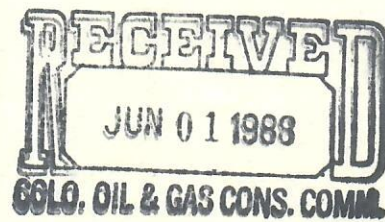
---

TABLE OF CONTENTS

---

WELL DATA.....	PAGE 1.
BIT RECORD.....	PAGE 2.
ELECTRIC LOG FORMATION AND ZONE TOPS.....	PAGE 2.
DAILY DRILLING CHRONOLOGY.....	PAGE 3.
DAILY DRILLING CHRONOLOGY...DEPTH VS DATE.....	PAGE 4.
ELECTRIC LOG OFFSET/CONTROL WELL CORRELATION CHART.....	PAGE 5.
SHOW EVALUATION.....	PAGE 6.
LITHOLOGY.....	PAGES 7-9.

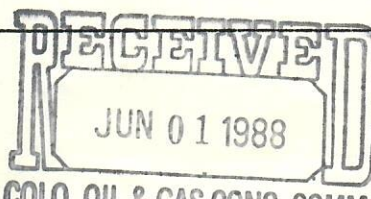
---



WELL DATA

OPERATOR: Medallion Petroleum, Inc., Tulsa, OK.  
WELL NAME: Lake Albert NO.1-1.  
FIELD NAME/PROSPECT: Lake Albert -Wildcat.  
LOCATION: 1980' fsl 660' fwl NW NW SEC.1-T17S-R43W, Kiowa Co., CO  
ELEVATION: 4042' -Ground; 4052' -KB.  
SPUD DATE: 4/21/88.  
COMPLETION DATE: 4/30/88.  
STATUS: Plugged and abandoned 4/30/88.  
HOLE SIZE: 12.250"-450'; 7.825"-TD[5380'].  
CASING: 8.625"-434'-Surface; No Production Casing run..  
DRILL COLLARS/PIPE: 6.25"/4.50"  
TOTAL DEPTH: 5380'(-1328')-Driller; 5379'(-1327')-Electric Log.  
CONTRACTOR: Murfin Drilling Co., Wichita, KS Rig NO.22; Wichita, KS  
GEOLOGIST: Randy Say - RSay Enterprises.  
ENGINEER: Warren Miller, Woodard, OK.  
MUD COMPANY: Davis Mud and Chemical Co., Denver, CO; Rich Steinbrink.  
MUD TYPE: NATIVE(SURFACE-4000'); GEL-CHEM[4000'-TD(5380')].  
MUDLOGGING: Unmanned Hotwire Chromatograph, Monitored by Wellsite Geologist; Unit supplied by LOG-RITE, Timnath, CO.  
DRILL STEM TEST: None.  
CORE: None.  
ELECTRIC LOGS: Schlumberger Well Services, Inc, Great Bend, KS.  
Engineer: Jeff Cutler.

LOGS RUN	INTERVAL
DIL-SFL-GR-SP	434'-5376'
LDT-CNL-GR-CAL	2400'-5377'
BHC-SONIC-GR	434'-5342'



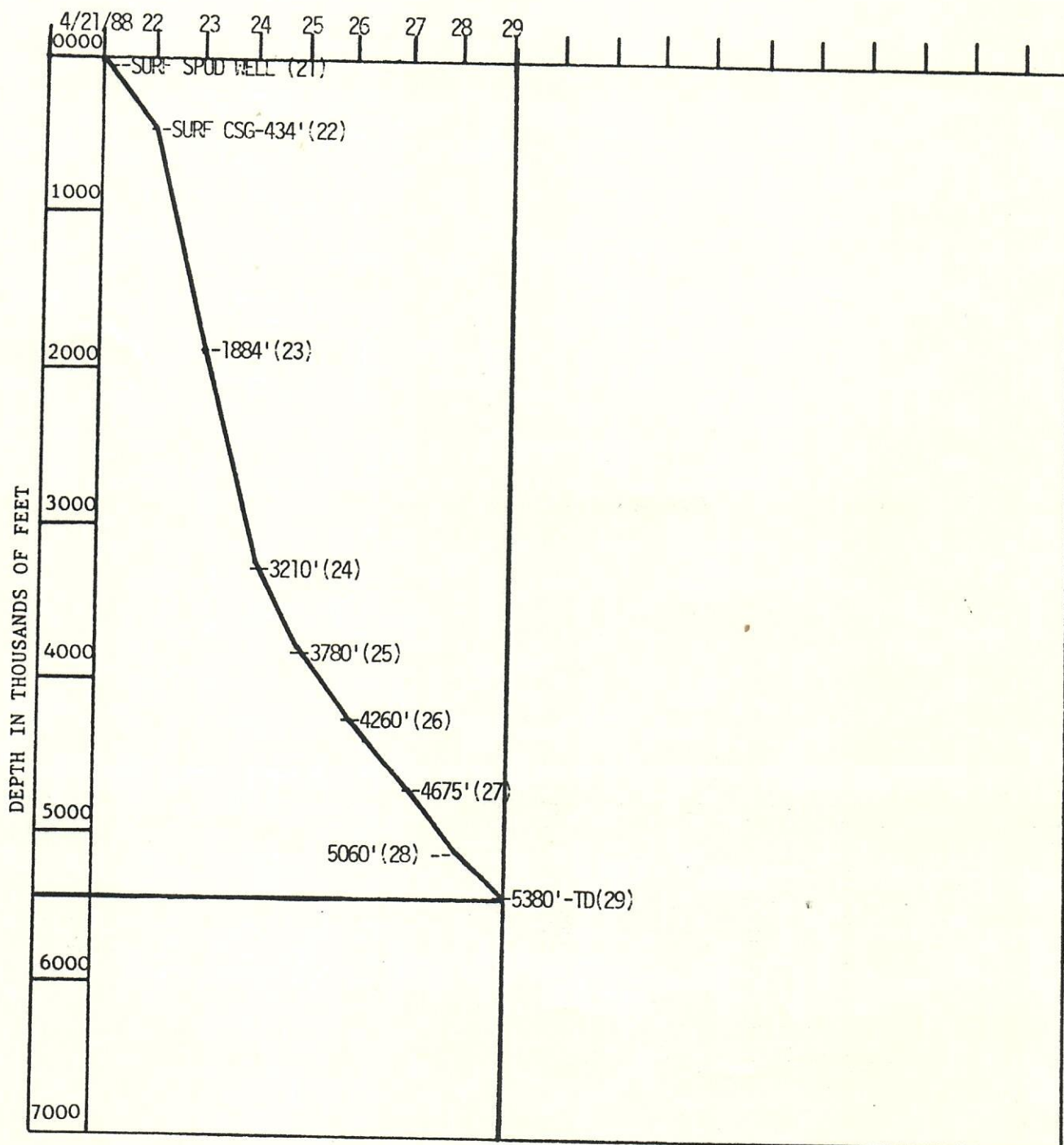


## DAILY DRILLING CHRONOLOGY

DATE	DEPTH	24HR FOOTAGE	DRILLING ACTIVITIES
4/21/88	0000'	0000'	RIG up, Spud well w/NB1, Drlg Surf hole to 450', Circ & cond hole, Trip out, Run surf csg to 434', Cmt Csg, WOC.
22	450'	450'	Trip in w/NB2, Drlg, DS, Drlg.
23	1884'	1434'	Drlg, Trip for NB3 @ 1884', Drlg w/NB3.
24	1884'	1326'	Drlg, DS, Stuck pie on DS, Run Crude Oil, Circ and Cond hole, Drlg.
25	3780'	570'	Drlg.
26	4260'	500'	Drlg.
27	4675'	415'	Drlg., DS, Drlg.
28	5060'	385'	Drlg.
29	5380'	320'	Drlg, Reach TD[5380'] @ 3AM, Circ & Cond Mud, Trip out for ELOGS, Run ELOGS, WOO.

DAILY DRILLING CHRONOLOGY

DATE 4/XX/88

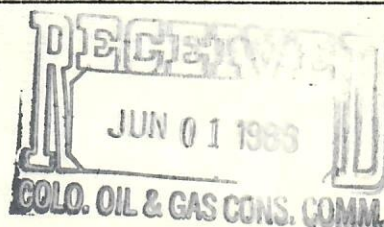


## BIT RECORD

NO	MAKE	TYPE	SIZE	DEPTH OUT	FOOTAGE	HOURS	FT/HR	DEVIATION/DEPTH
1	STC	SDS	12.250"	450'	450'	4.25	445.75	1.00-450'
2	HTC	J-2	7.825"	1884'	1434'	15.00	95.60	1.00-1884'
3	HTC	ATJ-22S	"	5380'	3496'	120.75	28.95	1.50-5380'

## ELECTRIC LOG FORMATION AND ZONE TOPS

FORMATION/ZONE	DEPTH(FEET)	DATUM(KB-4052')
Quaternary Eolian Sand	Surface	-----
Niobrara	N/A	-----
Fort Hays	836'	+3216'
Codell	904'	+3148'
Dakota	1628'	+2424'
Morrison	1942'	+2110'
PERMIAN	2168'	+1884'
Day Creek	2376'	+1676'
Blaine	2462'	+1590'
Cedar Hills	2618'	+1434'
Stone Corral	2702'	+1350'
Stone Corral(BASE)	2734'	+1318'
Wellington Sand	NOT DEV	-----
Neva	3442'	- 610'
Foraker	3516'	- 536'
Virgil	3750'	- 302'
Shawnee/Topeka	3836'	- 216'
Heebner Shale	4041'	+ 11'
Toronto Limestone	4052'	0
Lansing Kansas City	4072'	- 20'
Marmaton	4582'	- 530'
-Pawnee Member	4608'	- 556'
-Fort Scott Member	4668'	- 616'
Cherokee	4728'	- 676'
Atoka	4894'	- 842'
Morrow Shale(SONIC)	5049'	- 997'
Morrow Shale(STRAT)	5056'	-1004'
Morrow UPPER FUNK	NOT DEV	-----
Morrow LOWER FUNK	5119'	-1067'
Morrow LOWER FUNK	5122'	-1070-
Morrow ARAPAHOE	NOT DEV	-----
Morrow ARAPAHOE-BASE	-----	-----
Lower Morrow	5143'	-1091'
<b>MISSISSIPPIAN</b>		
-St. Genevieve	5232'	-1180'
-St. Louis	5284'	-1232-
-Spergen	5328'	-1276-
TOTAL DEPTH(DRILLER)	5380'	-1328'
TOTAL DEPTH(STRAP)	5380'	-1328-
TOTAL DEPTH(ELECTRIC LOG)	5379'	-1327'





API#8-8		SUBJECT WELL		OFFSET/CONTROL WELL NO.1						OFFSET/CONTROL WELL NO.2					
		Medallion Petroleum, Inc. Lake Albert NO. 1-1 1980fsl 660fml NW SW SEC. 1-T17S-R43W Kloma Co., CO WILDCAT 4/30/86		WEBB RESOURCES, INC. State Plains No. 16-13 660fsl 660fml SW SW SEC. 16-T17S-R42W Kloma Co., CO WILDCAT 7/12/70						BARRITT ENERGY CO. NO. 1-27 BELLER-FOLTZ 660fsl 660fml SE SE SEC. 27-T17S-R43W Kloma Co., CO WILDCAT 1/29/86					
LINE STRAT	ROCK STRATIGRAPHIC	PROG	SAMPL	DATUM-KB 4052	E-LOG	DATUM-KB 4052	THICK	ELEV. NO. 1	DIFF. NO. 2	E-LOG	DATUM-KB 4007	THICK	E-LOG	DATUM-KB 4060	THICK
	Quaternary Eolian Sand			SURFACE											
	Clabrara			N/A											
	Fort Hays			976	2216										
	Godell			904	2144										
	Dakota			1628	2424										
JURASSIC	Morrison			1992	2000										
PERMIAN	PERMIAN			2168	1884										
	Law Creek			2376	1676										
	Blaine			2462	1580										
	Cedar Hills			2518	1434										
	Stone Corral			2702	1250										
	Stone Corral (BASE)			2754	1208										
	Hollington Sand			NOT DEV											
	Hays			2942	510										
	Foraker			2516	526										
PENNSYLVANIAN	Virgil (STRAT)			2750	204										
	Shawnee/Topeka			2876	218										
	Heebner (SH)			4041	11										
	Toronto (LS)			4052											
	Lansing Kansas City			4072	-20										
	Marathon			4582	-530										
	Payette Member			4608	-556										
	Fort Scott Member			4658	-606										
	Cherokee			4728	-676										
	Atoka			4874	-822										
	Norron Shale (SUNIC)			5049	-997										
	Norron Shale (STRAT)			5056	-1004										
	Norron SS														
	Norron SS (FUNK)			5119	-1067										
	Norron SS (FUNK)-BASE			5122	-1070										
	Norron SS (Shawnee)			NOT DEV											
	Norron SS (Shawnee)-BASE														
	Lower Norron			5142	-1091										
MISSISSIPPIAN	St. Genevieve			5232	-1180										
	St. Louis			5284	-1232										
	Spargen			5328	-1276										
	TOTAL DEPTH (DRILLER)			5380	-1328										
	TOTAL DEPTH (STRAT)			5380	-1328										
	TOTAL DEPTH SELECTRIC LOG			5379	-1327										



## SHOW EVALUATION

The Medallion Petroleum, Inc., Lake Albert NO.1-1 [NW SW SEC.1-T17S-R43W, Kiowa Co., CO] was drilled as a wildcat well Southeast of the Arapahoe Field Area, with a primary objective of the Pennsylvanian Morrow Arapahoe Sand, and a possible secondary objective of the UPPER Funk Sand. The Arapahoe Sand did not develop at all, while Funk Sand developed a barely perceptible clastic lense of a 3 feet thick [5119'(-1067'- 5122'(-1070'))]. The only indication in the samples of the Funk Sand was a rare trace of medium to coarse grained feldspathic grains, while the electric logs showed a subtle deflection on the SP Curve and the Resistivity. The primary objective, the Arapahoe Sand, did not develop any kind of clastic signature whatsoever. Structurally, the Lake Albert NO.1-1 was 48 feet high at the top of the Morrow Shale(SONIC) [5049'(-997')] to the nearest offset/control well, the Webb Resources State Plains NO.16-13 [SW SW SEC.16-T17S-R42W, Kiowa Co., CO]. Although the Lake Albert NO.1-1 was seemingly in a favorable structural position, the lack of sand in the Morrow section led to the well being plugged and abandoned.

The other potentially productive zones, the Pennsylvanian Topeka, Lansing Kansas City and Marmaton Formations, and the Mississippian zones had the typical "trace" shows of the area, but did not develop any outstanding shows that warranted further testing even after electric log evaluation. See SHOW NO.1 and 2 listed below.

LANSING KANSAS CITY 4072'(-20)

SHOW NO.1 4088'-4102'(14')(-36)

LITHOLOGY: LS ltgy-mot crm pred gran-occ xfxl vfri-firm vslty occ slool  
vvchk mtrxocc tr vf dissem pyr in xl form.

POROSITY: FR(intergran).

OIL STAIN: None.

FLOR: TR pale yel.

CUT: TR slow mlky crush cut.

RESIDUE: None.

SHOW NO.2 4528'-4540'(12')(-476')

LITHOLOGY: LS tan-mgy-occ mot crm litho -gran vvfri-firm mfos & occ chk  
mtrx vsipyr occ arg.

OIL STAIN: None.

POROSITY: FR-occ goomold).

FLOR: 20% myel.

CUT: 10-20% slow mlky crush cut.

RESIDUE: None.



## LITHOLOGY

4000-4072 LS bf-crm-redbrn fri-firm gran-xfxl vvsilty arg vchk slpyr  
 Ø-p nsfoc w/intbd SH strgs mar-redbrn-ltgy vvsft blk  
 vslty arg cal, tr calc & pyr.

LANSING KANSAS CITY 4072' (-20').

4072-4110 LS ltgy-mot bf & crm xfxl-litho-gran vfri-firm arg chk mfos  
 w/chk mtrx slpyr Ø-fr; no oilstn; flor-tr-10% pale yel;  
 cut-tr slow mlky cut; res-none.

4110-4160 LS aa w/intbd SH strgs aa, tr pyr & calc.

4160-4190 LS mot tan-ltgy-crm xfxl-litho vfri-firm vchk slfos w/chk  
 mtrx slpyr occ slpyr Ø-tt-p nsfoc w/iintbd SH strgs ltgy-  
 mar-redbrn sft plty sft slcarb arg csalc, tr pyr.

4190-4250 LS aa incr mot fos w/calc infill occ tr ool vvchk nsfoc w/  
 SH strgs aa, tr pyr & calc.

4250-4280 LS aa w/intbd SH strgs aa, tr calc.

4280-4340 LS mot tan-brn=ltgy xfxl-microxl vvfri-firm fos w/chk mtrx  
 sl pyr & slty occ carb nsfoc w/SH strgs mar-ltgy-occ bk  
 sft plty vvcarb slcalc, tr pyr.

4340-4370 LS aa incr vvsilty occ slpyr tr scat carb mat nsfoc w/SH  
 strgs, tr calc & pyr.

4370-4420 LS bf-mot crm & gy microxl-litho vfri-mhd dns fos w/chk mtrx  
 slpyr occ calc infill Ø-p-tt nsfoc w/intbd SH strgs bk-  
 ltgy sft vcarb slsilty pyr calc, tr pyr & calc.

4420-4528 LS tan-ltgy-occ mot wh-gy xfxl-litho fri-mhd dns vvfos w/  
 calc infill occ sldolo pyr Ø-p-g nsfoc w/SH strgs, tr pyr.

4528-4540 SHOW NO.2 LS mot tan-brn xfx vfri-firm vvfos w/calc infill  
 occ chk mtrx pyr Ø-fr-occ g; oilstn-none; flor-20%myel;  
 cut-10-20% myel-mlky; res-none.

4540-4582 LS aa incr fos microxl hd dns calc infill tr carb mat pyr  
 Ø-fr-tt nsfoc w/intbd SH strgs bk-ltgy-gybrn sft vcarb  
 slcalc, tr pyr & occ rare tr cht.

MARMATON 4582' (-530').

4582-4608 LS tan-occ mgy crm microxl-litho vvfri-mhd dns fos w/  
 calc infill slpyr occ slty scat carb mat Ø-fr-tt w/  
 SH strgs bk-mgy-gybrn vvsft-firm plty carb slty slcalc  
 tr calc & pyr occ tr cht.



## PAWNEE MEMBER 4608'(-556').

4608-4668 LS tan-occ mgy & crm microxl-litho vvfri-firm-mhd dns vblky  
cln occ sldolo pyr nsfoc Ø-vtt; SH strgs aa tr pyr & cht.

## FORT SCOTT 4668'(-616')

4668-4728 LS mot mgy-tan & occ dkgy pyr slslyt dolo w/DOL strgs aa  
incr amt fos w/chk mtrx slchty Ø-p nsfoc w/intbd SH strgs  
bk-ltgy-occ mar sft-firm plty-blky arg vvcarb slslyt  
slcalc, trpyr.

## CHEROKEE 4728'(-676').

4728-4800 LS tan-brn-mgy microxl-litho fri-mhd dns fos sldolo occ pyr  
tr scat carb mat tr ool Ø-tt nsfoc w/SH strgs aa & incr  
amt DOL strgs bf hd blky chty, tr pyr.

4800-4860 LS aa w/intbd SH strgs aa, trpyr.

4860-4894 LS tan-gy microxl-litho vfri-firm fos dolo nsfoc w/SH strgs  
& DOL strgs bk-ltgy slpyr tr cht & pyr.

## ATOKA 4894'(-842').

4894-4950 LS mot tan-bk-brn & occ crm xfxl-microxl arg slpyr & carb  
fos w/calc infill nsfoc w/DOL strgs and SH bk-gybrn carb  
slpyr calc, trpy r& cht.

4950-5000 LS aa iincr dolo & pyr w/SH strgs, tr cht.

500-5049 LS mot brn-tan-occ mgy xfxl-litho-microxl fri-vhd dns blky  
vvfos w/calc infill slpyr & chty carb w/SH strgs bk carb  
slcalc & pyr, tr pyr & cht.

## MORROW SHALE(SONIC) 5049'(-997').

5049-5056 SH bk-ltgy-gybrn sft plty carb slty slcalc, tr pyr & occ  
cht w/LS strgs tan-gy microxl fos pyr tr pyr & cht.

## MORROW SHALE(STRAT) 5056'(-1004').

5056-5119 SH bk-mgy-gybrn-incr gygn-pale gn vvsft-firm plty-splin  
fis carb slty pyr slmica slcalc abnt pyr in fos casts  
w/LS strgs tan-mgy brn chky.

## MORROW FUNK SAND ZONE 5119'(-1067').

5119-5143 SH aa w/intbd LS aa and occ rare tr qtz grs(SS) pale yel-  
pink m-veg sbrd sbang kao vfields; NO true SS DEV.



---

LOWER MORROW 5143'(-1091').

5143-5200 SH bk-ltgy-gygn-pale gn-gybrn sft-firm plty-splin fis arg  
carb slsly lmy pyr w/intbd LS strgs tan--wh-crm occ  
brn fos w/chk mtrx pyr slool dolo chty & pyr nsfoc.

5200-5232 SH ss w/intbd LS aa incr fos w/chk mtrx nsfoc, incr abnt  
pyr & cht.

MISS(ST. GENEVIEVE) 5232'(-1180').

5232-5284 LS mot brn-mgy-tan fos calc infill pyr chky occ chty incr  
DOL strgs brn-bf gran-microxl occ chty nsfoc w/thin SH  
strgs, tr pyr & cht.

ST. LOUIS 5284'(-1232').

5284-5328 LS aa w/incr abnt DOL strgs brn-ltgy gran-xfxl suc arg sl  
pyr & slty occ chty nsfoc w/occ thin SH strgs, abnt pyr  
& incr amt cht.

SPERGEN 5328'(-1276').

5328-5360 DOL brn-ltgy gran-microxl fri-mhd dns arg slsly pyr chty  
nsfoc w/intbd SH & LS strgs, abnt pyr & cht.

5360-5380 DOL mot brn-mgy-bf pred gran-microxlcln & hd) fri-vhd  
arg slty-sdy occ vpyr & occ tr cht pods w/LS strgs &  
strgs, abnt pyr & cht.

---

TOTAL DEPTH(DRILLER) 5380'(-1328')