WELL SURVEY FOR CONOCOPHILLIPS

CONOCOPHILLIPS ALASKA INC (ATTN: ANN TAYLOR)
700 G STREET
ANCHORAGE, AK 99501

WELL: 3N-07
FIELD: COLVILLE RIVER UNIT
COUNTY: NORTH SLOPE BOROUGH
STATE: ALASKA

LOCATION: 70.3 NORTH OF CLOVER LEAF
ELEVATION: KB: 34.0 GL: 0.0
API NUMBER: 50-103-20607
JOB NUMBER: AK-XM-0010-0010
LAT: 70.3 LONG: -150.9
DATE: 10/15/2007

DIRECTIONAL DRILLING, INC.
5631 SILVERADO WAY, SUITE G
ANCHORAGE, ALASKA 99518
(907) 562-2646
FAX (907) 562-2651

DIRECTIONAL DRILLER: ALASKA DIRECTIONAL SERVICES, INC.
MWD ENGINEER: BRIAN ROBERTSON
MWD TOOL: 1.75" AKO MOTOR
MWD SENSOR: 1.75" MWD
MWD SURVEY: 0 TO 10000'
SURVEY CALCULATION: MINIMUM CURVATURE
VERTICAL SECTION: 180.00 DEGREES
DATUM: NAD27
GRID: ALASKA ZONE 4
MAGNETIC DECLINATION: 26.00 DEGREES EAST
DIP: 80.90 DEGREES
MAGNETIC FIELD STRENGTH: 57548 NT
DATE OF SURVEY: 10/15/2007

DRILL PIPE	4.0	3.826	14.00
HWDP	4.0	3.000	25.00
DRILL COLLAR	4.75	2.813	30.00
DRILL COLLAR	6.5	2.813	30.00

DRILL PIPE	4.0	3.826	14.00
HWDP	4.0	3.000	25.00
DRILL COLLAR	4.75	2.813	30.00
DRILL COLLAR	6.5	2.813	30.00

Equipment Note

Pipe Lower Compensator Tool	1.00'
Gamma Detector	1.00'

Remarks/Survey Results

PLEASE NOTE: DO NOT CONTACT ANY ASP FIELDS ON THE WELL

DRILL TRAC MEMORIES: 1.75" MOTOR #1
1.75" MWD #1
1.75" MWD #2
TOTAL: 3.50 #1
TOTAL: 3.50 #2

CASING AND TUBING DRIFTED

SIZE	WTGS	FROM	TO	SIZE	WTGS	FROM	TO
7.625"	29.7	SURFACE	3500'				
4.5"	12.6	3500'+/-	9500'				
2.875"	6	9500'+/-	9600'				
2.375"	4.7	9600'+/-	9800'				

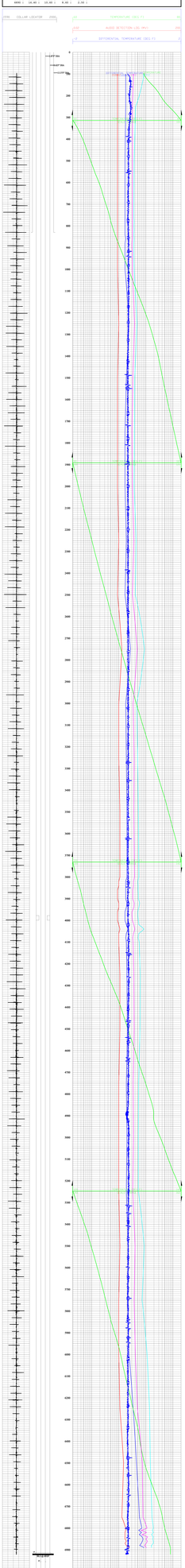
SPL	SPACING	INSTRUCTIONS
1	0.5000'	
		TRACKED TO: 7800'-7900'
		SAW LOST MEMORIES. HOLE:7'-4800.4".
		BUILDING ZIGZAGS. 4800.4'-4854.4".
		4854.4'-9800' STRAIGHT.
		STOPS COLLARS: 9800'+
		DATE: 10/15/2007

TOOL DIAGRAM

COLLAR LOCATOR AT 0.0' ↑

TEMPERATURE TOOL AT 7.0' ↑

AUDIO DETECTOR AT 8.0' ↑

BUILD DATA - 1.5 DEG/100 CAL

DEPTH	ZDIRN 1	ZDIRN2 1	ZDIRN3 1	ZDIRN4 1
100	0.70 0	0.50 1	0.80 1	0.90 1
200	0.70 0	0.50 1	0.80 1	0.90 1
300	0.70 0	0.50 1	0.80 1	0.90 1
400	0.70 0	0.50 1	0.80 1	0.90 1
500	0.70 0	0.50 1	0.80 1	0.90 1
600	0.70 0	0.50 1	0.80 1	0.90 1
700	0.70 0	0.50 1	0.80 1	0.90 1
800	0.80 0	0.50 1	0.80 1	0.90 1
900	0.80 0	0.50 1	0.80 1	0.90 1
1000	0.80 0	0.50 1	0.80 1	0.90 1
1100	0.80 0	0.50 1	0.80 1	0.90 1
1200	0.80 0	0.50 1	0.80 1	0.90 1
1300	0.80 0	0.50 1	0.80 1	0.90 1
1400	0.80 0	0.50 1	0.80 1	0.90 1
1500	0.80 0	0.50 1	0.80 1	0.90 1
1600	0.80 0	0.50 1	0.80 1	0.90 1
1700	0.80 0	0.50 1	0.80 1	0.90 1
1800	0.80 0	0.50 1	0.80 1	0.90 1
1900	0.80 0	0.50 1	0.80 1	0.90 1
2000	0.80 0	0.50 1	0.80 1	0.90 1
2100	0.80 0	0.50 1	0.80 1	0.90 1
2200	0.80 0	0.50 1	0.80 1	0.90 1
2300	0.80 0	0.50 1	0.80 1	0.90 1
2400	0.80 0	0.50 1	0.80 1	0.90 1
2500	0.80 0	0.50 1	0.80 1	0.90 1
2600	0.80 0	0.50 1	0.80 1	0.90 1
2700	0.80 0	0.50 1	0.80 1	0.90 1
2800	0.80 0	0.50 1	0.80 1	0.90 1
2900	0.80 0	0.50 1	0.80 1	0.90 1
3000	0.80 0	0.50 1	0.80 1	0.90 1
3100	0.80 0	0.50 1	0.80 1	0.90 1
3200	0.80 0	0.50 1	0.80 1	0.90 1
3300	0.80 0	0.50 1	0.80 1	0.90 1
3400	0.80 0	0.50 1	0.80 1	0.90 1
3500	0.80 0	0.50 1	0.80 1	0.90 1
3600	0.80 0	0.50 1	0.80 1	0.90 1
3700	0.80 0	0.50 1	0.80 1	0.90 1
3800	0.80 0	0.50 1	0.80 1	0.90 1
3900	0.80 0	0.50 1	0.80 1	0.90 1
4000	0.80 0	0.50 1	0.80 1	0.90 1
4100	0.80 0	0.50 1	0.80 1	0.90 1
4200	0.80 0	0.50 1	0.80 1	0.90 1
4300	0.80 0	0.50 1	0.80 1	0.90 1
4400	0.80 0	0.50 1	0.80 1	0.90 1
4500	0.80 0	0.50 1	0.80 1	0.90 1
4600	0.80 0	0.50 1	0.80 1	0.90 1
4700	0.80 0	0.50 1	0.80 1	0.90 1
4800	0.80 0	0.50 1	0.80 1	0.90 1
4900	0.80 0	0.50 1	0.80 1	0.90 1
5000	0.80 0	0.50 1	0.80 1	0.90 1
5100	0.80 0	0.50 1	0.80 1	0.90 1
5200	0.80 0	0.50 1	0.80 1	0.90 1
5300	0.80 0	0.50 1	0.80 1	0.90 1
5400	0.80 0	0.50 1	0.80 1	0.90 1
5500	0.80 0	0.50 1	0.80 1	0.90 1
5600	0.80 0	0.50 1	0.80 1	0.90 1
5700	0.80 0	0.50 1	0.80 1	0.90 1
5800	0.80 0	0.50 1	0.80 1	0.90 1
5900	0.80 0	0.50 1	0.80 1	0.90 1
6000	0.80 0	0.50 1	0.80 1	0.90 1
6100	0.80 0	0.50 1	0.80 1	0.90 1
6200	0.80 0	0.50 1	0.80 1	0.90 1
6300	0.80 0	0.50 1	0.80 1	0.90 1
6400	0.80 0	0.50 1	0.80 1	0.90 1
6500	0.80 0	0.50 1	0.80 1	0.90 1
6600	0.80 0	0.50 1	0.80 1	0.90 1
6700	0.80 0	0.50 1	0.80 1	0.90 1
6800	0.80 0	0.50 1	0.80 1	0.90 1
6900	0.80 0	0.50 1	0.80 1	0.90 1
7000	0.80 0	0.50 1	0.80 1	0.90 1