



CLIENT: EXTRACTION OIL & GAS
WELL: UNITED A S16-20-6N (014-20806)
COUNTY: BROOMFIELD ENSIGN 147
RIG:

M.W.D. OPERATORS: J.FROST / T.BACA
DIRECTIONAL DRILLER: EXTRACTION (JASON)
TOOL AZM TO TRUE NORTH: 8.24
JOB #: RM-200330

VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
Tie In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
# 1	134	0.57	258.28	134.00	0.29	-0.14	-0.65	0.43
# 2	226	0.74	260.57	225.99	0.73	-0.33	-1.69	0.19
# 3	317	0.65	297.04	316.99	0.85	-0.19	-2.73	0.49
# 4	406	0.26	193.68	405.98	0.94	-0.15	-3.22	0.85
# 5	496	0.74	168.28	495.98	1.67	-0.92	-3.15	0.57
# 6	585	0.83	172.24	584.97	2.78	-2.12	-2.95	0.12
# 7	674	0.08	161.34	673.97	3.43	-2.82	-2.84	0.84
# 8	764	1.01	295.73	763.96	3.33	-2.54	-3.54	1.19
# 9	853	2.54	289.75	852.92	2.98	-1.53	-6.10	1.73
# 10	942	5.49	285.27	941.69	2.72	0.26	-12.07	3.33
# 11	1,032	8.52	283.25	1,031.01	2.76	2.92	-22.71	3.38
# 12	1,121	9.53	283.60	1,118.91	2.96	6.17	-36.29	1.14
# 13	1,210	10.06	285.71	1,206.61	2.84	10.00	-50.93	0.72
# 14	1,299	12.74	282.81	1,293.84	2.89	14.28	-67.99	3.08
# 15	1,389	15.07	279.64	1,381.20	4.08	18.44	-89.20	2.72
# 16	1,479	14.89	280.78	1,468.14	5.72	22.57	-112.10	0.38
# 17	1,568	17.22	279.55	1,553.67	7.49	26.89	-136.32	2.65
PTB	1,640	17.22	279.55	1,622.44	9.24	30.43	-157.34	0.00



CLIENT: EXTRACTION OIL & GAS
WELL: UNITED A S16-20-6N
COUNTY: BROOMFIELD
RIG: ENSIGN 147
VERTICAL SECTION : 194.25

M.W.D. OPERATORS: J.FROST / T.BACA
DIRECTIONAL DRILLER: EXTRACTION (JASON)
TOOL AZM TO TRUE NORTH: 8.24
JOB #: RM-200330

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
 WELL: UNITED A S16-20-6N
 COUNTY: BROOMFIELD
 RIG: ENSIGN 147
 M.W.D. OPERATORS: J.FROST / T.BACA
 DIRECTIONAL DRILLER: EXTRACTION (JASON)
 TOOL AZM TO TRUE NORTH: 8.24
 JOB #: RM-200330
 VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
 WELL: UNITED A S16-20-6N
 COUNTY: BROOMFIELD
 RIG: ENSIGN 147
 M.W.D. OPERATORS: J.FROST / T.BACA
 DIRECTIONAL DRILLER: EXTRACTION (JASON)
 TOOL AZM TO TRUE NORTH: 8.24
 JOB #: RM-200330
 VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
 WELL: UNITED A S16-20-6N
 COUNTY: BROOMFIELD
 RIG: ENSIGN 147
 M.W.D. OPERATORS: J.FROST / T.BACA
 DIRECTIONAL DRILLER: EXTRACTION (JASON)
 TOOL AZM TO TRUE NORTH: 8.24
 JOB #: RM-200330
 VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
 WELL: UNITED A S16-20-6N
 COUNTY: BROOMFIELD
 RIG: ENSIGN 147
 M.W.D. OPERATORS: J.FROST / T.BACA
 DIRECTIONAL DRILLER: EXTRACTION (JASON)
 TOOL AZM TO TRUE NORTH: 8.24
 JOB #: RM-200330
 VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
WELL: UNITED A S16-20-6N
COUNTY: BROOMFIELD
RIG: ENSIGN 147
VERTICAL SECTION : 194.25

M.W.D. OPERATORS: J.FROST / T.BACA
DIRECTIONAL DRILLER: EXTRACTION (JASON)
TOOL AZM TO TRUE NORTH: 8.24
JOB #: RM-200330

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
 WELL: UNITED A S16-20-6N
 COUNTY: BROOMFIELD
 RIG: ENSIGN 147
 M.W.D. OPERATORS: J.FROST / T.BACA
 DIRECTIONAL DRILLER: EXTRACTION (JASON)
 TOOL AZM TO TRUE NORTH: 8.24
 JOB #: RM-200330
 VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------



CLIENT: EXTRACTION OIL & GAS
 WELL: UNITED A S16-20-6N
 COUNTY: BROOMFIELD
 RIG: ENSIGN 147
 M.W.D. OPERATORS: J.FROST / T.BACA
 DIRECTIONAL DRILLER: EXTRACTION (JASON)
 TOOL AZM TO TRUE NORTH: 8.24
 JOB #: RM-200330
 VERTICAL SECTION : 194.25

Survey #	Survey Depth (FT.)	Inclination (Deg)	Azimuth (Deg)	T.V.D. (FT.)	Vertical Section (FT.)	N/-S (FT.)	E / -W (FT.)	Dog Leg (Deg.)
-------------	-----------------------	----------------------	------------------	-----------------	---------------------------	---------------	-----------------	-------------------