

CUT-FILL VALUES ON PAD PERIMETER					
Point Label	Station	Offset	Existing Elev.	Graded Elev.	Cut (+) Fill (-)
A	0+00.00	0.00	6099.53	6093.80	5.73
B	0+00.00	-70.00	6102.07	6093.91	8.16
C	0+00.00	-145.00	6104.77	6094.04	10.73
D	0+25.00	-170.00	6104.79	6094.10	10.69
E	2+10.00	-170.00	6102.32	6094.40	7.92
F	3+35.00	-170.00	6099.02	6094.16	4.86
G	5+05.00	-170.00	6093.53	6093.83	-0.30
H	5+30.00	-145.00	6092.34	6093.76	-1.42
I	5+30.00	0.00	6088.62	6093.48	-4.86
J	5+30.00	155.00	6085.66	6093.36	-7.70
K	5+05.00	180.00	6085.71	6093.33	-7.62
L	3+35.00	180.00	6088.86	6093.33	-4.47
M	2+10.00	180.00	6091.82	6093.33	-1.51
N	0+25.00	180.00	6093.75	6093.33	0.42
O	0+00.00	155.00	6094.89	6093.43	1.46



WELL SITE DESIGN AND CONSTRUCTION NOTES:

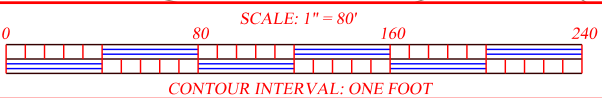
1. The graded well pad elevation was selected to approximate balance of excavation to embankment and to provide a stockpile of earth for the eventual frac pit reclamation.
2. The approximate volume of the frac pit is 3,850 C.Y. Material for frac pit reclamation will be obtained from the waste material stockpile.
3. Within the computed catch lines, the area of the proposed pad is 4.83 acres and the waste material stockpile area is 0.37 acres. This area does not include the area of the topsoil stockpiles nor the small additional area required for grading machine travel. The estimated area of the disturbance limits as shown is 6.27 acres.
4. The area of the road within the computed catch lines is 0.32 acres. The area within the road and pipe line boundary is 0.44 acres. The area within the pipe line boundary is 0.05 acres.
5. Approximately 300 feet of 9" diameter straw wattles is planned for installation.

ESTIMATED EARTHWORK QUANTITIES

PAD TOPSOIL (6" DEPTH)	3,890 C.Y.
ROAD TOPSOIL (3" DPTH)	130 C.Y.
PAD EXCAVATION	18,050 C.Y.
ROAD EXCAVATION	10 C.Y.
PAD EMBANKMENT (10% SHRINK ASSUMED)	12,980 C.Y.
ROAD EMBANKMENT (10% SHRINK ASSUMED)	1,230 C.Y.
WASTE MATERIAL	3,850 C.Y.
TOTAL EARTHWORK VOLUME	22,080 C.Y.

PREPARED BY:
P.E. GROSCH CONSTRUCTION, INC.
SURVEYORS - ENGINEERS - CONSTRUCTORS
P. O. BOX 36 WORLAND, WY 82401 (307)347-3332

SUR:	AMG	7/08/13	PRJ. #:	31A12
DES:	SAG	5/16/15	REC:	lidar / 85-44
DWN:	SAG	5/16/15	FILE:	/GpkData-v8/Client/Black Hills E&P/Colo/Mesa
REV:			DWG:	31a12 WF 10-31-13/Dgn/10-31R7_ex6A-site



OWNER
**BLACK HILLS PLATEAU
PRODUCTION COMPANY, LLC**
DENVER, COLORADO

PROJECT
WINTER FLATS 10-31-99AH, 10-31-99BH, 10-31-99CH
& WINTER FLATS 10-31-99DH
NW¼ NE¼, SECTION 10, T. 9 S., R. 99 W.
MESA COUNTY, COLORADO

DRAWING TITLE
EXHIBIT VI-A
DRAWING VI-A
WELL SITE GRADING PLAN

Diversion Ditch Stakeout Data						
Station	Hinge Point Offset	Hinge Point Elevation	Catch Point Offset	Catch Point Elevation	Cut (+) Fill (-)	Slope Ratio
0+00.00	-5.00	6090.80	-6.32	6091.68	0.88	1.5:1
0+20.00	-5.00	6090.88	-6.08	6091.60	0.72	1.5:1
0+25.00	0.00	6090.90	-1.96	6091.82	0.92	2.1:1
1+50.00	0.00	6091.42	-3.01	6093.48	2.06	1.5:1
2+01.84	0.00	6091.64	-4.98	6094.96	3.32	1.5:1
3+56.84	0.00	6092.28	-11.29	6102.20	9.92	1.5:1
4+26.84	0.00	6092.57	-14.45	6102.20	9.63	1.5:1
5+01.84	0.00	6092.88	-18.21	6105.02	12.14	1.5:1
5+53.67	0.00	6093.10	-18.64	6105.53	12.43	1.5:1
7+38.67	-5.00	6092.45	-16.11	6103.19	10.74	1.5:1
8+63.67	0.00	6092.02	-11.25	6099.52	7.50	1.5:1
10+33.67	0.00	6091.42	-3.29	6093.61	2.19	1.5:1
10+43.67	0.00	6091.39	-3.96	6093.24	1.85	2.1:1
10+48.67	-5.00	6091.37	-7.69	6093.16	1.79	1.5:1
10+68.67	-5.00	6091.30	-6.74	6092.46	1.16	1.5:1