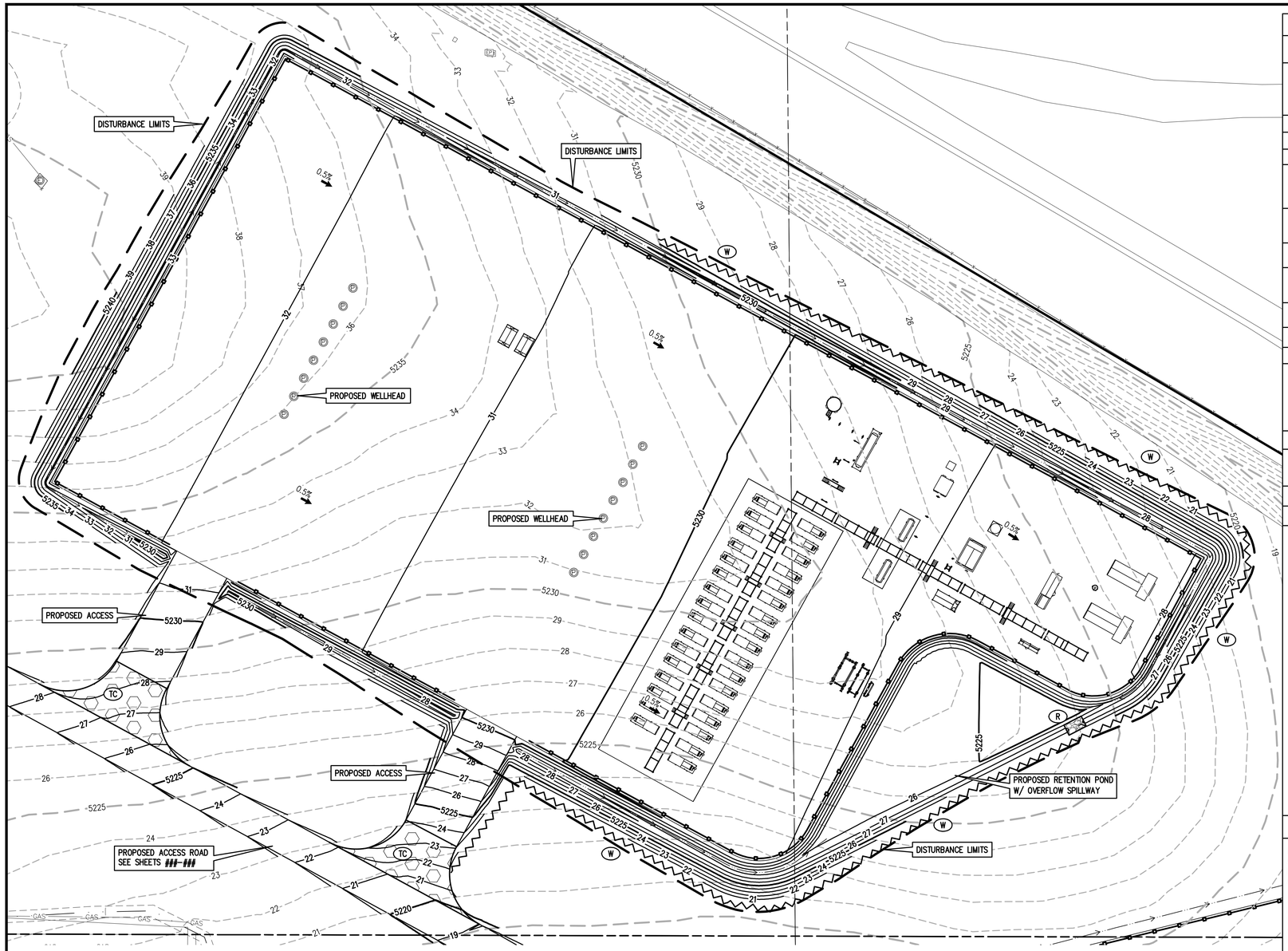


LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	
81	81	MINOR CONTOUR (1' INTERVAL)
5280	5280	MAJOR CONTOUR (5' INTERVAL)
		PROPERTY BOUNDARY
		EDGE OF ASPHALT
		EDGE OF GRAVEL
		SECTION LINE
		CURB AND GUTTER (SPILL/CATCH)
		WIRE FENCE
		DITCH FLOWLINE
GAS	GAS	GASLINE

EXISTING SYMBOLS	PROPOSED SYMBOLS	
		CONTROL POINT
25.44	25.36	SPOT ELEVATION
		PERCENT SLOPE
3:1	3:1	NOMINAL SLOPE
EP		ELECTRIC PANEL
G		GAS MARKER
V		IRRIGATION CONTROL VALVE
		PROPOSED WELL

N

GRAPHIC SCALE
50 0 50 100
(IN FEET)
1 INCH = 50 FT

1 / Q1 | Q1 DRILLING STORMWATER MANAGEMENT PLAN

SITE DESCRIPTION

CONSTRUCTION ACTIVITY	DRILLING OF 8 OIL & GAS WELLS, CONSTRUCTION OF ASSOCIATED PRODUCTION EQUIPMENT, AND CONSTRUCTION OF ACCESS ROAD.
CONSTRUCTION DATES	TBD
AREA OF SITE	±5.4 ACRES
LOCATION OF SITE	LATITUDE: 39°58'50" N LONGITUDE: 104°59'40" W
EXISTING VEGETATION	NATIVE GRASSES
SOIL CONDITION	ACCORDING TO THE *NATURAL RESOURCES CONSERVATION SERVICES*, THIS SITE IS 44% PLATNER LOAM AND 56% ULM LOAM. THE PROPERTY GENERALLY SLOPES TO THE EAST AT SLOPES OF 3%.
POTENTIAL POLLUTION SOURCES	DUST FROM DRILLING & ACCESS ROAD CONSTRUCTION, NON-VEGETATED SOILS, FUEL, OIL, AND FLUIDS UTILIZED DURING DRILLING, CONCRETE WASHOUTS, OUTDOOR STORAGE ACTIVITIES, PORTABLE RESTROOMS, GENERAL REFUSE.
LOCATION OF NON-STORMWATER DISCHARGE	NONE
SITE FEATURES & SENSITIVE AREAS TO BE PROTECTED	THE SITE INCLUDES A WELL PAD, ENTRANCE ROAD, AND 3:1 SLOPES THAT MATCH INTO EXISTING TOPOGRAPHY. SURROUNDING AREAS TO BE PROTECTED INCLUDE FIELDS AND PUBLIC ROADS.
NAME AND LOCATION OF RECEIVING WATERS	STORMWATER RUNOFF TRAVELS EASTERLY TO BIG DRY CREEK WHICH FLOWS TO THE SOUTH AND DISCHARGES INTO STANDLEY LAKE.

OVERALL SCOPE / PROJECT CHARACTERISTICS

INDUSTRIAL ACTIVITIES	OIL AND GAS PRODUCTION
FINAL SITE DISPOSITION	ONCE THE PRODUCTION PHASE FOR THE SITE IS COMPLETE, THE PRODUCTION SITE WILL BE RECLAIMED. THE WELLS WILL BE PLUGGED, CAPPED, & ABANDONED. THE TANK BATTERY WILL BE REMOVED. ANY UNNECESSARY PORTIONS OF THE UPGRADED ACCESS ROAD WILL BE REMOVED. SOILS WILL BE CONTOURED TO THE EXISTING SURROUNDING TERRAIN. (STOCKPILED TOPSOIL WILL BE REDISTRIBUTED ALONG WITH THE SEEDING ACROSS THE DISTURBED SOIL AREA IN ORDER TO REESTABLISH VEGETATION COVERAGE)

BEST MANAGEMENT PRACTICES (BMP's)

STORM WATER QUALITY BEST MANAGEMENT PRACTICE SHALL BE IMPLEMENTED TO MINIMIZE SOIL EROSION, SEDIMENTATION, INCREASED POLLUTION LOADS AND CHANGED WATER FLOW CHARACTERISTICS RESULTING FROM LAND DISTURBING ACTIVITY TO THE MAXIMUM EXTENT PRACTICAL, AS TO MINIMIZE POLLUTION OF RECEIVING WATERS.

IMPLEMENTED BMP'S

CONSTRUCTION STRUCTURAL BMP'S	PERMANENT STRUCTURAL BMP'S
☒ VTC PAD	☐ VTC PAD
☒ DITCH & BERM SYSTEM	☐ DITCH & BERM SYSTEM
☐ INLET PROTECTION	☐ CULVERT OUTLET PROTECTION
☐ CULVERT OUTLET PROTECTION	☐ WASH WATER SEDIMENTATION POND
☐ WASH WATER SEDIMENTATION POND	☐ COGCC APPROVED CONTAINMENT BERM
☐ SILT FENCING	☐ RIP RAP
☐ RIP RAP	☒ REVEGETATION
☐ EROSION CONTROL MAT	
☒ SEDIMENT CONTROL LOG	
☒ SURFACE ROUGHENING	
ADDITIONAL BMP'S:	ADDITIONAL BMP'S:

EROSION AND SEDIMENT CONTROL

1. TO THE EXTENT PRACTICABLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES. AT ALL TIMES DURING PROJECT CONSTRUCTION, ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES.

2. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEEDED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER.

3. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. IT IS RECOMMENDED THAT THE PERMANENT SEED MIX BE PLANTED AFTER OCTOBER TO KEEP SEEDLINGS FROM DEVELOPING BEFORE WINTER. TEMPORARY VEGETATIVE COVER CONSISTING OF ANNUAL RYE GRASS SHALL BE HYDRO SEEDED AT 20 POUNDS PURE LIVE SEED PER ACRE.

4. FUGITIVE DUST EMISSIONS RESULTING FROM DRILLING & ACCESS ROAD CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING WATER.

5. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED AS SOON AS PRACTICAL IF REQUIRED BY THE STORMWATER ADMINISTRATOR OR THEIR REPRESENTATIVE.

6. AREAS WHERE SEDIMENT CONTROL LOGS ARE NOT INDICATED MAY REQUIRE SOME FORM OF SEDIMENT CONTROL. STRAW MULCH AND/OR TEMPORARY SEEDING MAY BE UTILIZED AS NECESSARY.

INSPECTION AND MAINTENANCE

INSPECTIONS:
1. PERFORM EVERY 14 DAYS, AND FOLLOWING A WEATHER EVENT CAUSING RUNOFF DURING THE CONSTRUCTION PHASE. PERFORM EVERY 30 DAYS DURING THE COMPLETED AND INTERIM PHASES.
2. AN INSPECTION REPORT WILL BE FILLED OUT, & FILED FOR EACH INSPECTION PERFORMED.
3. MAKE A COPY OF EACH INSPECTION REPORT AVAILABLE TO THE COUNTY UPON REQUEST.

MAINTENANCE:
1. PERFORM MAINTENANCE AND REPAIRS AS SOON AS POSSIBLE ON ITEMS OR AREAS IDENTIFIED IN THE INSPECTION REPORT
2. PERFORM MAINTENANCE AS INDICATED IN THE URBAN DRAINAGE & FLOOD CONTROL DISTRICT, URBAN STORM DRAINAGE CRITERIA MANUAL, VOL 3, PER MANUFACTURER'S SPECIFICATIONS OR OTHER SOURCES DETERMINED TO BE ACCEPTABLE.

AN EFFICIENT RECORD-KEEPING SYSTEM IS A HELPFUL TOOL IN MANAGING INSPECTION AND MAINTENANCE REPORTS. INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING LOGS, AND OTHER SITE RELATED CORRESPONDENCE WILL BE MAINTAINED IN THE MASTER EROSION CONTROL PLAN.

BASELINE
Engineering · Planning · Surveying
710 11TH AVENUE, SUITE 105 · GREELEY, COLORADO 80631
P: 970.353.7600 · F: 970.353.7601 · www.baselinecorp.com

DESIGNED BY AAD | DRAWN BY LDS | CHECKED BY AAD

REVISION DESCRIPTION | PREPARED BY | DATE

EXTRACTION OIL & GAS

CITY OF BROOMFIELD / COUNTY OF BROOMFIELD

EXHIBIT Q – INTERCHANGE A PAD

NW QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST, 6TH P.M.

DRILLING STORMWATER MANAGEMENT PLAN

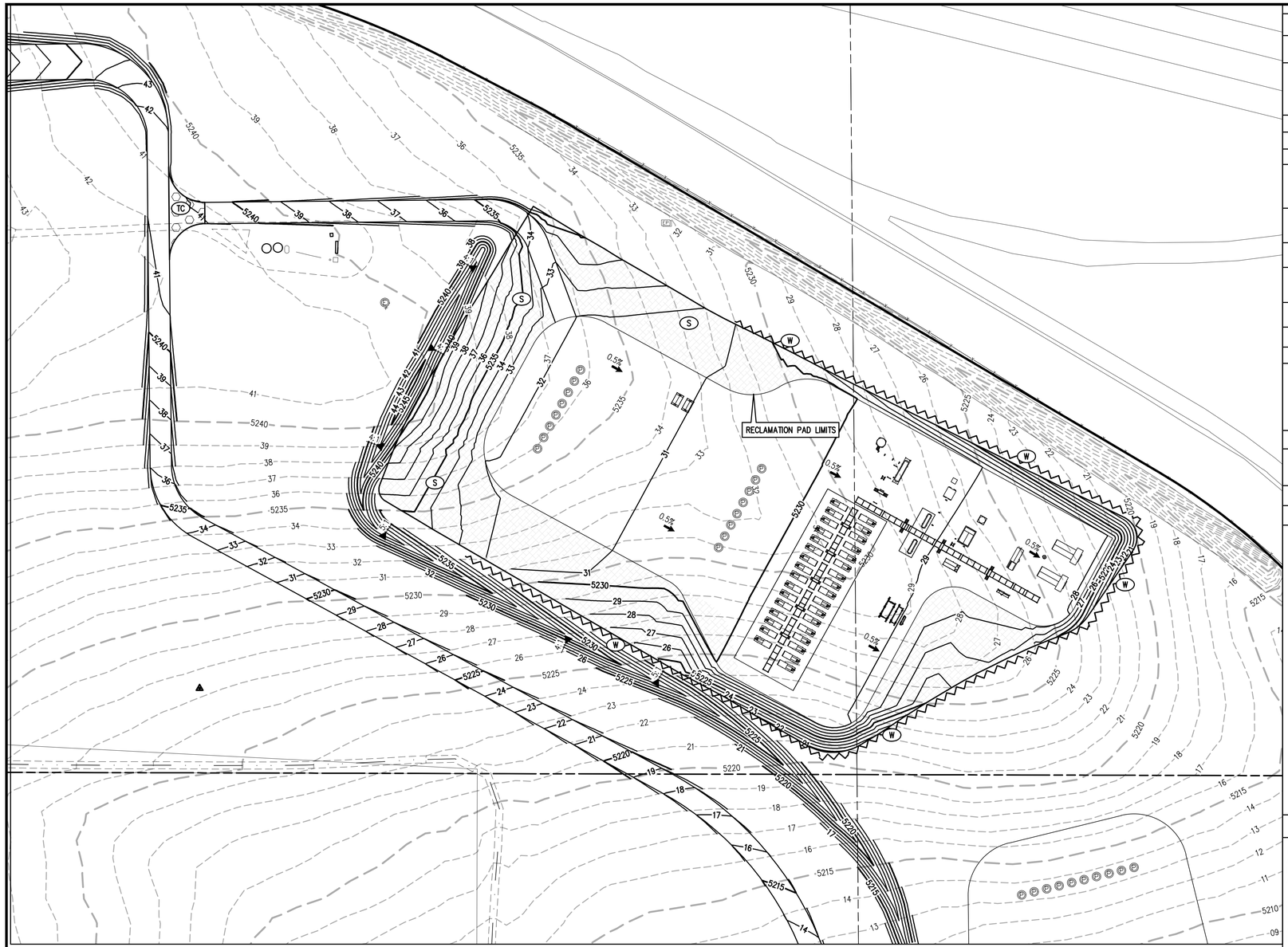
PREPARED UNDER THE DIRECT SUPERVISION OF

PRELIMINARY NOT FOR CONSTRUCTION

FOR AND ON BEHALF OF BASELINE CORPORATION

INITIAL SUBMITTAL	10/28/2016
DRAWING SIZE	24" X 36"
SURVEY FIRM: BASELINE	SURVEY DATE: 5/5/2016
JOB NO.	C015272
DRAWING NAME	Interchange A Drilling.dwg
SHEET 1 OF 3	

Q1



SITE DESCRIPTION

CONSTRUCTION ACTIVITY	DRILLING OF 8 OIL & GAS WELLS, CONSTRUCTION OF ASSOCIATED PRODUCTION EQUIPMENT, AND CONSTRUCTION OF ACCESS ROAD.
CONSTRUCTION DATES	TBD
AREA OF SITE	±5.4 ACRES
LOCATION OF SITE	LATITUDE: 39°58'50" N LONGITUDE: 104°59'40" W
EXISTING VEGETATION	NATIVE GRASSES
SOIL CONDITION	ACCORDING TO THE *NATURAL RESOURCES CONSERVATION SERVICES*, THIS SITE IS 44% PLATNER LOAM AND 56% ULM LOAM. THE PROPERTY GENERALLY SLOPES TO THE EAST AT SLOPES OF 3%.
POTENTIAL POLLUTION SOURCES	DUST FROM DRILLING & ACCESS ROAD CONSTRUCTION, NON-VEGETATED SOILS, FUEL, OIL, AND FLUIDS UTILIZED DURING DRILLING, CONCRETE WASHOUTS, OUTDOOR STORAGE ACTIVITIES, PORTABLE RESTROOMS, GENERAL REFUSE.
LOCATION OF NON-STORMWATER DISCHARGE	NONE
SITE FEATURES & SENSITIVE AREAS TO BE PROTECTED	THE SITE INCLUDES A WELL PAD, ENTRANCE ROAD, AND 3:1 SLOPES THAT MATCH INTO EXISTING TOPOGRAPHY. SURROUNDING AREAS TO BE PROTECTED INCLUDE FIELDS AND PUBLIC ROADS.
NAME AND LOCATION OF RECEIVING WATERS	STORMWATER RUNOFF TRAVELS EASTERLY TO BIG DRY CREEK WHICH FLOWS TO THE SOUTH AND DISCHARGES INTO STANDLEY LAKE.

OVERALL SCOPE / PROJECT CHARACTERISTICS

INDUSTRIAL ACTIVITIES	OIL AND GAS PRODUCTION
FINAL SITE DISPOSITION	ONCE THE PRODUCTION PHASE FOR THE SITE IS COMPLETE, THE PRODUCTION SITE WILL BE RECLAIMED. THE WELLS WILL BE PLUGGED, CAPPED, & ABANDONED. THE TANK BATTERY WILL BE REMOVED. ANY UNNECESSARY PORTIONS OF THE UPGRADED ACCESS ROAD WILL BE REMOVED. SOILS WILL BE CONTOURED TO THE EXISTING SURROUNDING TERRAIN. (STOCKPILED TOPSOIL WILL BE REDISTRIBUTED ALONG WITH THE SEEDING ACROSS THE DISTURBED SOIL AREA IN ORDER TO REESTABLISH VEGETATION COVERAGE)

BEST MANAGEMENT PRACTICES (BMP's)

STORM WATER QUALITY BEST MANAGEMENT PRACTICE SHALL BE IMPLEMENTED TO MINIMIZE SOIL EROSION, SEDIMENTATION, INCREASED POLLUTION LOADS AND CHANGED WATER FLOW CHARACTERISTICS RESULTING FROM LAND DISTURBING ACTIVITY TO THE MAXIMUM EXTENT PRACTICAL, AS TO MINIMIZE POLLUTION OF RECEIVING WATERS.

IMPLEMENTED BMP'S

CONSTRUCTION STRUCTURAL BMP'S	PERMANENT STRUCTURAL BMP'S
☒ VTC PAD	☐ VTC PAD
☒ DITCH & BERM SYSTEM	☐ DITCH & BERM SYSTEM
☐ INLET PROTECTION	☐ CULVERT OUTLET PROTECTION
☐ CULVERT OUTLET PROTECTION	☐ WASH WATER SEDIMENTATION POND
☐ WASH WATER SEDIMENTATION POND	☐ COGCC APPROVED CONTAINMENT BERM
☐ SILT FENCING	☐ RIP RAP
☐ RIP RAP	☒ REVEGETATION
☐ EROSION CONTROL MAT	
☒ SEDIMENT CONTROL LOG	
☒ SURFACE ROUGHENING	
ADDITIONAL BMP'S:	ADDITIONAL BMP'S:

EROSION AND SEDIMENT CONTROL

1. TO THE EXTENT PRACTICABLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES. AT ALL TIMES DURING PROJECT CONSTRUCTION, ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES.

2. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEEDED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER.

3. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. IT IS RECOMMENDED THAT THE PERMANENT SEED MIX BE PLANTED AFTER OCTOBER TO KEEP SEEDLINGS FROM DEVELOPING BEFORE WINTER. TEMPORARY VEGETATIVE COVER CONSISTING OF ANNUAL RYE GRASS SHALL BE HYDRO SEEDED AT 20 POUNDS PURE LIVE SEED PER ACRE.

4. FUGITIVE DUST EMISSIONS RESULTING FROM DRILLING & ACCESS ROAD CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING WATER.

5. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED AS SOON AS PRACTICAL IF REQUIRED BY THE STORMWATER ADMINISTRATOR OR THEIR REPRESENTATIVE.

6. AREAS WHERE SEDIMENT CONTROL LOGS ARE NOT INDICATED MAY REQUIRE SOME FORM OF SEDIMENT CONTROL. STRAW MULCH AND/OR TEMPORARY SEEDING MAY BE UTILIZED AS NECESSARY.

INSPECTION AND MAINTENANCE

INSPECTIONS:
1. PERFORM EVERY 14 DAYS, AND FOLLOWING A WEATHER EVENT CAUSING RUNOFF DURING THE CONSTRUCTION PHASE. PERFORM EVERY 30 DAYS DURING THE COMPLETED AND INTERIM PHASES.
2. AN INSPECTION REPORT WILL BE FILLED OUT, & FILED FOR EACH INSPECTION PERFORMED.
3. MAKE A COPY OF EACH INSPECTION REPORT AVAILABLE TO THE COUNTY UPON REQUEST.

MAINTENANCE:
1. PERFORM MAINTENANCE AND REPAIRS AS SOON AS POSSIBLE ON ITEMS OR AREAS IDENTIFIED IN THE INSPECTION REPORT
2. PERFORM MAINTENANCE AS INDICATED IN THE URBAN DRAINAGE & FLOOD CONTROL DISTRICT, URBAN STORM DRAINAGE CRITERIA MANUAL, VOL 3, PER MANUFACTURER'S SPECIFICATIONS OR OTHER SOURCES DETERMINED TO BE ACCEPTABLE.

AN EFFICIENT RECORD-KEEPING SYSTEM IS A HELPFUL TOOL IN MANAGING INSPECTION AND MAINTENANCE REPORTS. INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING LOGS, AND OTHER SITE RELATED CORRESPONDENCE WILL BE MAINTAINED IN THE MASTER EROSION CONTROL PLAN.

LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	
81	81	MINOR CONTOUR (1' INTERVAL)
5280	5280	MAJOR CONTOUR (5' INTERVAL)
		PROPERTY BOUNDARY
		EDGE OF ASPHALT
		EDGE OF GRAVEL
		SECTION LINE
		CURB AND GUTTER (SPILL/CATCH)
		WIRE FENCE
		DITCH FLOWLINE
GAS GAS	GAS	GASLINE

EXISTING SYMBOLS	PROPOSED SYMBOLS	
△		CONTROL POINT
25.4±	25.36	SPOT ELEVATION
		PERCENT SLOPE
3:1	3:1	NOMINAL SLOPE
EP		ELECTRIC PANEL
G		GAS MARKER
V		IRRIGATION CONTROL VALVE
P		PROPOSED WELL
	TC	TRACKING CONTROL
	S	SEEDING

N

GRAPHIC SCALE
50 0 50 100
(IN FEET)
1 INCH = 50 FT

1 / Q2 | Q2 — INTERIM STORMWATER MANAGEMENT PLAN

BASELINE
Engineering · Planning · Surveying
710 10TH AVENUE, SUITE 105 · GREELEY, COLORADO 80631
P: 970.353.7600 · F: 970.353.7601 · www.baselinecorp.com

REVISION DESCRIPTION	PREPARED BY	DATE

DESIGNED BY AAD | DRAWN BY LDS | CHECKED BY AAD

EXTRACTION OIL & GAS

CITY OF BROOMFIELD — COUNTY OF BROOMFIELD

EXHIBIT Q – INTERCHANGE A PAD

NW QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST, 6TH P.M.

INTERIM STORMWATER MANAGEMENT PLAN

PREPARED UNDER THE DIRECT SUPERVISION OF

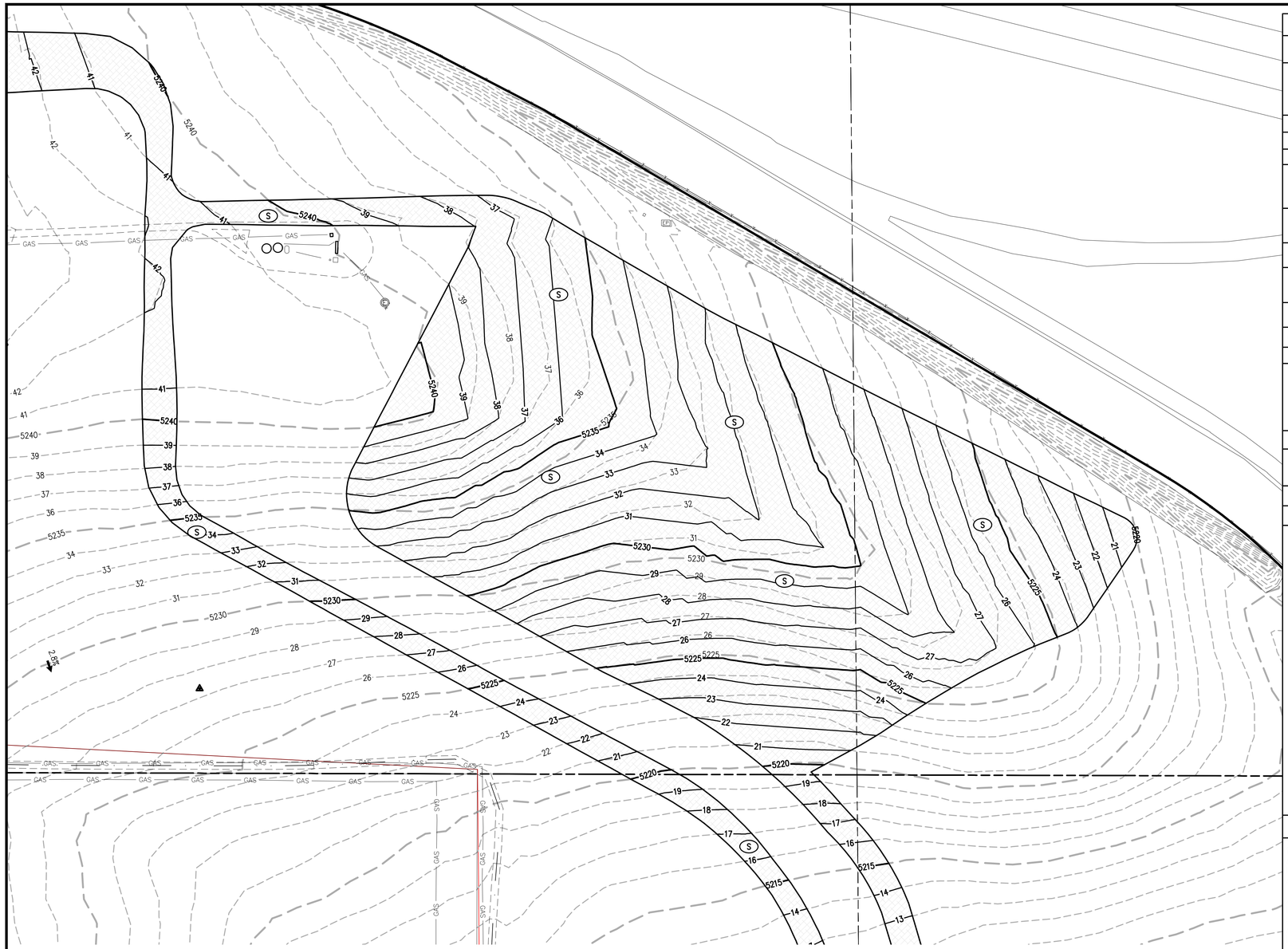
PRELIMINARY NOT FOR CONSTRUCTION

FOR AND ON BEHALF OF BASELINE CORPORATION

INITIAL SUBMITTAL	10/28/2016
DRAWING SIZE	24" X 36"
SURVEY FIRM	BASELINE
SURVEY DATE	5/5/2016
JOB NO.	C015272
DRAWING NAME	Interchange A Interim Drilling.dwg
SHEET	2 OF 3

Q2

M:\co-15272 Extraction Broomfield-Thornton Gathering Line Feed\Drawings\02-Interchange A\Interchange A Interim Drilling.dwg, 1/4/2018 11:15:48 AM, Luke Seeber



SITE DESCRIPTION

CONSTRUCTION ACTIVITY	DRILLING OF 21 OIL & GAS WELLS, CONSTRUCTION OF ASSOCIATED PRODUCTION EQUIPMENT, AND CONSTRUCTION OF ACCESS ROAD.
CONSTRUCTION DATES	TBD
AREA OF SITE	±14.8 ACRES
LOCATION OF SITE	LATITUDE: 39°59'15" N LONGITUDE: 105°00'10" W
EXISTING VEGETATION	NATIVE GRASSES
SOIL CONDITION	ACCORDING TO THE *NATURAL RESOURCES CONSERVATION SERVICES*, THIS SITE IS 90% PLATNER LOAM AND 10% ULM LOAM. THE PROPERTY GENERALLY SLOPES TO THE EAST AT SLOPES OF 2%.
POTENTIAL POLLUTION SOURCES	DUST FROM DRILLING & ACCESS ROAD CONSTRUCTION, NON-VEGETATED SOILS, FUEL, OIL, AND FLUIDS UTILIZED DURING DRILLING, CONCRETE WASHOUTS, OUTDOOR STORAGE ACTIVITIES, PORTABLE RESTROOMS, GENERAL REFUSE.
LOCATION OF NON-STORMWATER DISCHARGE	NONE
SITE FEATURES & SENSITIVE AREAS TO BE PROTECTED	THE SITE INCLUDES A WELL PAD, ENTRANCE ROAD, AND 3:1 SLOPES THAT MATCH INTO EXISTING TOPOGRAPHY. SURROUNDING AREAS TO BE PROTECTED INCLUDE FIELDS AND PUBLIC ROADS.
NAME AND LOCATION OF RECEIVING WATERS	STORMWATER RUNOFF TRAVELS EASTERLY TO BIG DRY CREEK WHICH FLOWS TO THE SOUTH AND DISCHARGES INTO STANDLEY LAKE.

OVERALL SCOPE / PROJECT CHARACTERISTICS

INDUSTRIAL ACTIVITIES	OIL AND GAS PRODUCTION
FINAL SITE DISPOSITION	ONCE THE PRODUCTION PHASE FOR THE SITE IS COMPLETE, THE PRODUCTION SITE WILL BE RECLAIMED. THE WELLS WILL BE PLUGGED, CAPPED, & ABANDONED. THE TANK BATTERY WILL BE REMOVED. ANY UNNECESSARY PORTIONS OF THE UPGRADED ACCESS ROAD WILL BE REMOVED. SOILS WILL BE CONTOURED TO THE EXISTING SURROUNDING TERRAIN. (STOCKPILED TOPSOIL WILL BE REDISTRIBUTED ALONG WITH THE SEEDING ACROSS THE DISTURBED SOIL AREA IN ORDER TO REESTABLISH VEGETATION COVERAGE)

BEST MANAGEMENT PRACTICES (BMP's)

STORM WATER QUALITY BEST MANAGEMENT PRACTICE SHALL BE IMPLEMENTED TO MINIMIZE SOIL EROSION, SEDIMENTATION, INCREASED POLLUTION LOADS AND CHANGED WATER FLOW CHARACTERISTICS RESULTING FROM LAND DISTURBING ACTIVITY TO THE MAXIMUM EXTENT PRACTICAL, AS TO MINIMIZE POLLUTION OF RECEIVING WATERS.

IMPLEMENTED BMP'S

CONSTRUCTION STRUCTURAL BMP'S	PERMANENT STRUCTURAL BMP'S
☒ VTC PAD	☐ VTC PAD
☒ DITCH & BERM SYSTEM	☐ DITCH & BERM SYSTEM
☐ INLET PROTECTION	☐ CULVERT OUTLET PROTECTION
☐ CULVERT OUTLET PROTECTION	☐ WASH WATER SEDIMENTATION POND
☐ WASH WATER SEDIMENTATION POND	☐ COGCC APPROVED CONTAINMENT BERM
☐ SILT FENCING	☐ RIP RAP
☐ RIP RAP	☒ REVEGETATION
☒ EROSION CONTROL MAT	
☒ SEDIMENT CONTROL LOG	
☒ SURFACE ROUGHENING	
ADDITIONAL BMP'S:	ADDITIONAL BMP'S:

EROSION AND SEDIMENT CONTROL

1. TO THE EXTENT PRACTICABLE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING ACTIVITIES. AT ALL TIMES DURING PROJECT CONSTRUCTION, ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO PREVENT ACCELERATED EROSION ON THE SITE AND ON ANY ADJACENT PROPERTIES.

2. ALL TOPSOIL, WHERE PHYSICALLY PRACTICABLE, SHALL BE SALVAGED AND NO TOPSOIL SHALL BE REMOVED FROM SITE EXCEPT AS SET FORTH IN THE APPROVED PLANS. TOPSOIL AND OVERBURDEN SHALL BE SEGREGATED AND STOCKPILED SEPARATELY. TOPSOIL AND OVERBURDEN SHALL BE REDISTRIBUTED WITHIN THE GRADED AREA AFTER ROUGH GRADING TO PROVIDE A SUITABLE BASE FOR AREAS WHICH WILL BE SEEDED AND PLANTED. RUNOFF FROM STOCKPILED AREA SHALL BE CONTROLLED TO PREVENT EROSION AND RESULTANT SEDIMENTATION OF RECEIVING WATER.

3. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 14 DAYS TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WILL BE LEFT DORMANT FOR LONGER THAN 30 DAYS. IT IS RECOMMENDED THAT THE PERMANENT SEED MIX BE PLANTED AFTER OCTOBER TO KEEP SEEDLINGS FROM DEVELOPING BEFORE WINTER. TEMPORARY VEGETATIVE COVER CONSISTING OF ANNUAL RYE GRASS SHALL BE HYDRO SEEDED AT 20 POUNDS PURE LIVE SEED PER ACRE.

4. FUGITIVE DUST EMISSIONS RESULTING FROM DRILLING & ACCESS ROAD CONSTRUCTION ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING WATER.

5. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING CONSTRUCTION AND SHALL BE INSTALLED AS SOON AS PRACTICAL IF REQUIRED BY THE STORMWATER ADMINISTRATOR OR THEIR REPRESENTATIVE.

6. AREAS WHERE SEDIMENT CONTROL LOGS ARE NOT INDICATED MAY REQUIRE SOME FORM OF SEDIMENT CONTROL. STRAW MULCH AND/OR TEMPORARY SEEDING MAY BE UTILIZED AS NECESSARY.

INSPECTION AND MAINTENANCE

INSPECTIONS:
1. PERFORM EVERY 14 DAYS, AND FOLLOWING A WEATHER EVENT CAUSING RUNOFF DURING THE CONSTRUCTION PHASE. PERFORM EVERY 30 DAYS DURING THE COMPLETED AND INTERIM PHASES.
2. AN INSPECTION REPORT WILL BE FILLED OUT, & FILED FOR EACH INSPECTION PERFORMED.
3. MAKE A COPY OF EACH INSPECTION REPORT AVAILABLE TO THE COUNTY UPON REQUEST.

MAINTENANCE:
1. PERFORM MAINTENANCE AND REPAIRS AS SOON AS POSSIBLE ON ITEMS OR AREAS IDENTIFIED IN THE INSPECTION REPORT
2. PERFORM MAINTENANCE AS INDICATED IN THE URBAN DRAINAGE & FLOOD CONTROL DISTRICT, URBAN STORM DRAINAGE CRITERIA MANUAL, VOL 3, PER MANUFACTURER'S SPECIFICATIONS OR OTHER SOURCES DETERMINED TO BE ACCEPTABLE.

AN EFFICIENT RECORD-KEEPING SYSTEM IS A HELPFUL TOOL IN MANAGING INSPECTION AND MAINTENANCE REPORTS. INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING LOGS, AND OTHER SITE RELATED CORRESPONDENCE WILL BE MAINTAINED IN THE MASTER EROSION CONTROL PLAN.

LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	
81	81	MINOR CONTOUR (1' INTERVAL)
5280	5280	MAJOR CONTOUR (5' INTERVAL)
		PROPERTY BOUNDARY
		EDGE OF ASPHALT
		EDGE OF GRAVEL
		SECTION LINE
		CURB AND GUTTER (SPILL/CATCH)
		WIRE FENCE
		DITCH FLOWLINE
GAS	GAS	GASLINE

EXISTING SYMBOLS	PROPOSED SYMBOLS	
		CONTROL POINT
25.4±	25.36	SPOT ELEVATION
		PERCENT SLOPE
3:1	3:1	NOMINAL SLOPE
EP		ELECTRIC PANEL
GM		GAS MARKER
IV		IRRIGATION CONTROL VALVE
		PROPOSED WELL

N

GRAPHIC SCALE
80 0 80 160
(IN FEET)
1 INCH = 80 FT

1 / Q3 Q3 RECLAMATION STORMWATER MANAGEMENT PLAN

BASELINE
Engineering · Planning · Surveying
710 10TH AVENUE, SUITE 105 · GREELEY, COLORADO 80631
P: 970.353.7600 · F: 970.353.7601 · www.baselinecorp.com

REVISION DESCRIPTION	PREPARED BY	DATE

DESIGNED BY AAD | DRAWN BY LDS | CHECKED BY AAD

EXTRACTION OIL & GAS

CITY OF BROOMFIELD — COUNTY OF BROOMFIELD

EXHIBIT Q – INTERCHANGE A PAD

NW QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 68 WEST, 6TH P.M.

RECLAMATION STORMWATER MANAGEMENT PLAN

PREPARED UNDER THE DIRECT SUPERVISION OF

PRELIMINARY NOT FOR CONSTRUCTION

FOR AND ON BEHALF OF BASELINE CORPORATION

INITIAL SUBMITTAL	10/28/2016
DRAWING SIZE	24" X 36"
SURVEY FIRM: BASELINE	SURVEY DATE: 5/5/2016
JOB NO.	C015272
DRAWING NAME	Interchange A Reclamation.dwg
SHEET	3 OF 3

Q3