

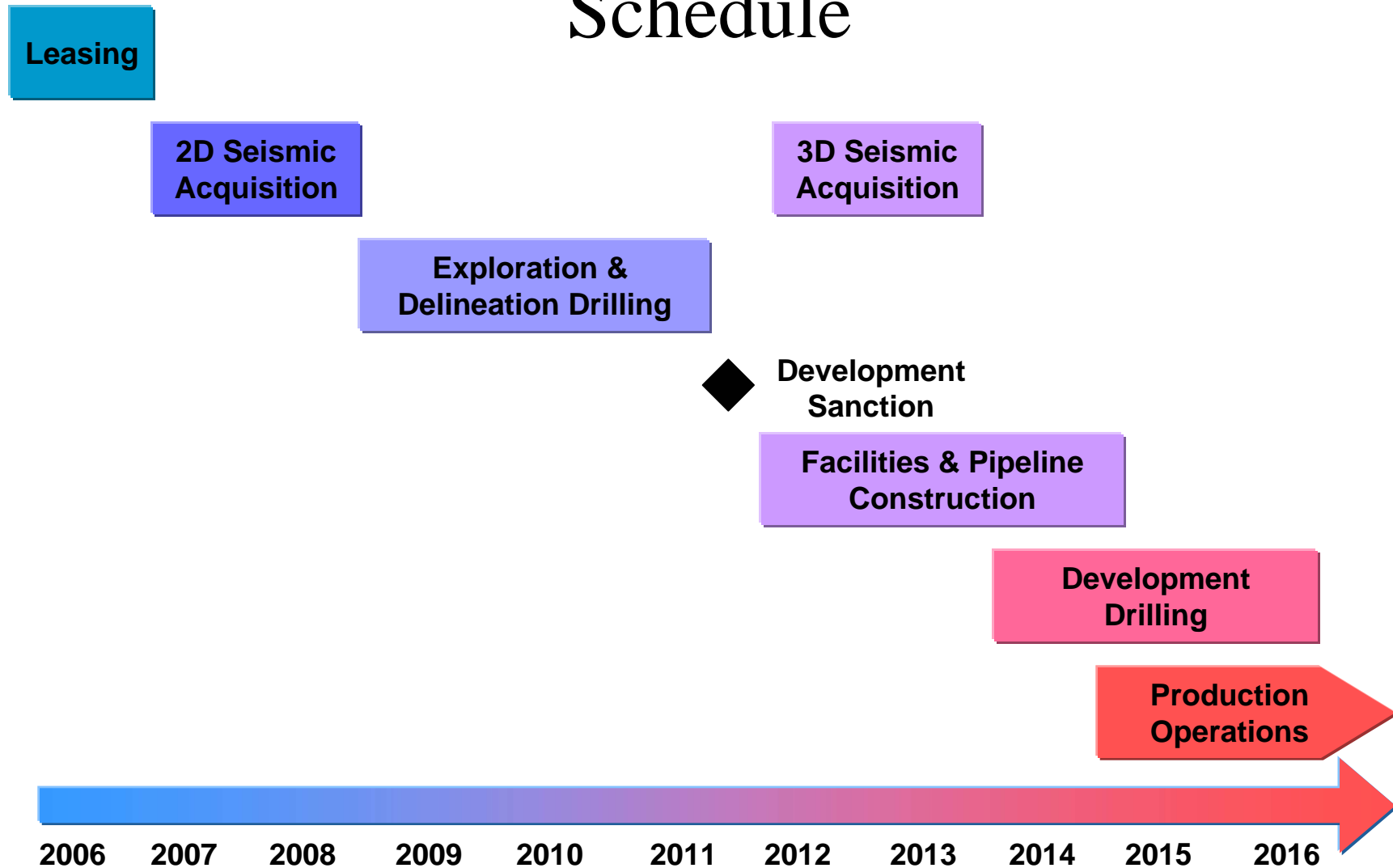
Yukon Flats Oil and Gas Development Phases

Manpower and Contractors

Doyon, Limited

December 2004

Yukon Flats Oil & Gas Development Schedule



Yukon Flats Oil & Gas Development

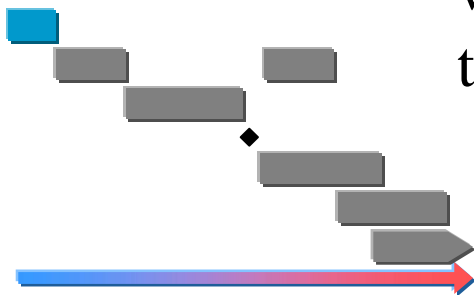
Leasing Phase

Activity: Doyon will lease oil and gas rights to oil producers for exploration and development.

Potential

Companies: ConocoPhillips, Armstrong, Kerr-McGee, Pioneer, Unocal, Marathon, others

Process: Doyon will negotiate with interested operators for a deal that could include lease bonuses and work programs requiring activities to explore the lands in a timely manner.



Yukon Flats Oil & Gas Development

2D & 3D Seismic Acquisition

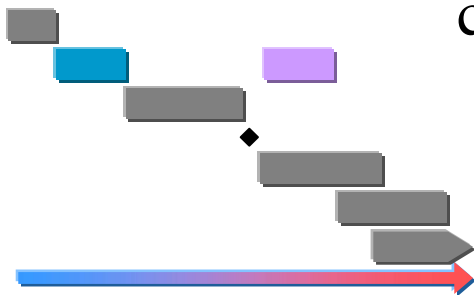
Activity: Seismic data acquisition to map prospects (2D) and reservoirs (3D) for drilling locations

Primary

Contractors: PGS Onshore, Veritas DGC

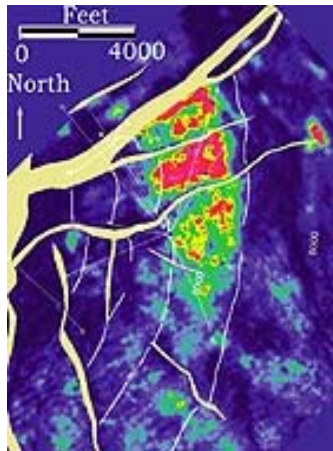
Secondary

Services : Surveyors, camp service caterers (DUS), brushing & clearing, helicopter support, winter road construction/maintenance

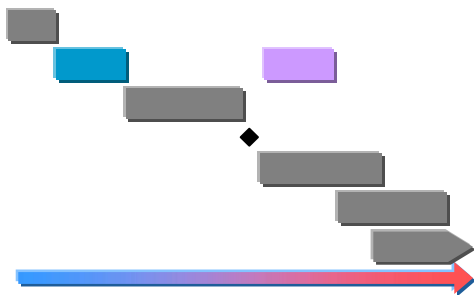


Yukon Flats Oil & Gas Development

Seismic Manpower Requirements



Position	2D Seismic	3D Seismic
Supt and Co. Rep	3	4
Surveyors	8	16
Drilling Crew	15	20
Recording Crew	18	25
Caterers	6	9
Total	50	74



Potential local hire in many positions

Yukon Flats Oil & Gas Development

Exploration & Development Drilling

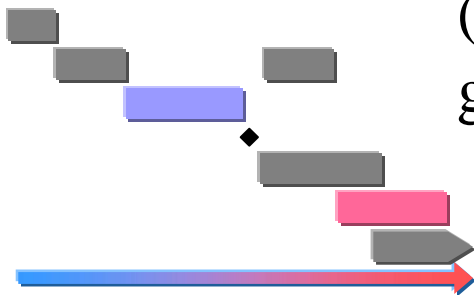
Activity: Drilling wells to find and develop oil and gas fields

Primary

Contractors: Doyon Drilling, Nabors Alaska Drilling and Nordic Calista Services

Secondary

Services : Camp service caterers (DUS), winter road and pad construction/maintenance, drilling services (mud, bits, logging, directional, casing crews, geologist, expediting, trucking, cementing and other)



Yukon Flats Oil & Gas Development

Drilling Manpower Requirements



Position	Number
Supervisors/Tool pushers	8
Rig Crews	32
Welders, Electricians, Mechanics & Roustabouts	14
Winter Road Build and Maintain	12
Drilling Services	34
Caterers/Security	10
Total	110

Potential local hire in many positions

Yukon Flats Oil & Gas Development

Facilities Construction

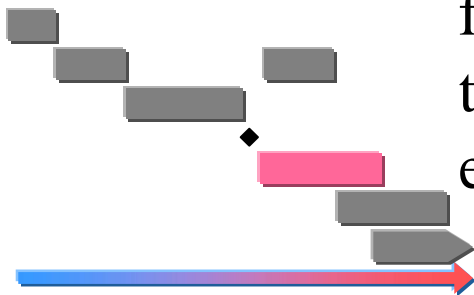
Activity: Design, procurement and construction of facilities for the production of oil and gas

Primary

Services : VECO, ASRC ES, NANA-Colt, H.C. Price, Udelhoven, others

Secondary

Services : Engineering, permitting, road/pad construction, pipelining, steel fabricators, camp caterers (DUS), trucking, many subcontractors and equipment providers



Yukon Flats Oil & Gas Development

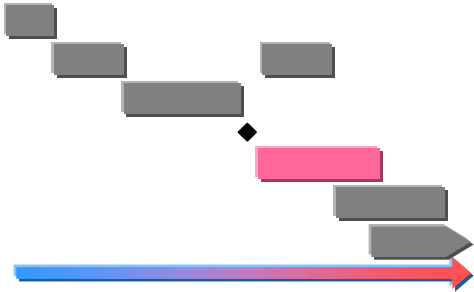
Facilities Construction Manpower



Position	Number*
Project Management	5-10
Construction Crews	100-200
Permanent Road Build and Maintain	10-20
Support Services such as mechanics, electricians, water/sewage treatment	20-40
Caterers/Security	15-30
Total	150-300

* Dependent on size and types of development

Potential local hire in many positions



Yukon Flats Oil & Gas Development

Pipeline Construction

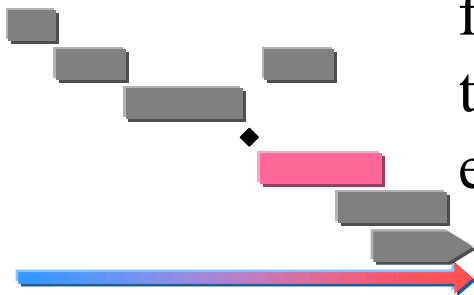
Activity: Design, procurement and construction of facilities for the production of oil and gas

Primary

Services : VECO, ASRC ES, NANA-Colt, H.C. Price, others

Secondary

Services : Engineering, permitting, road/pad construction, pipelining, steel fabricators, camp caterers (DUS), trucking, many subcontractors and equipment providers



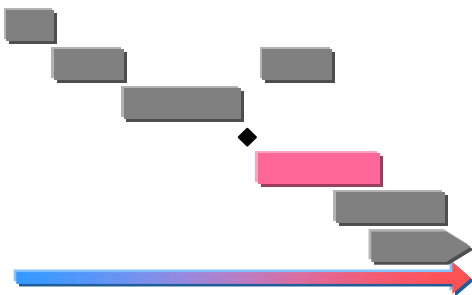
Yukon Flats Oil & Gas Development

Pipeline Construction Manpower



Position	Number
Project Management	2-4
Welders & Helpers	20-30
General Laborers	10-15
Permanent Road: Build and Maintain	5-10
Support Services such as mechanics, electricians	10-20
Caterers/Security	5-10
Total	50-80

* Dependent on size and types of development
Potential local hire in many positions



Yukon Flats Oil & Gas Development

Production Operations

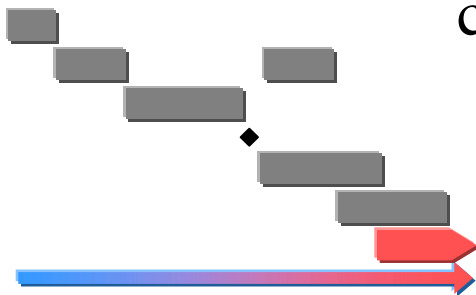
Activity: Producing oil and gas for the life of the field (20-30 years) by the operator

Primary

Contractors: Drilling and maintenance services, camp caterers(DUS), oilfield equipment and supplies providers

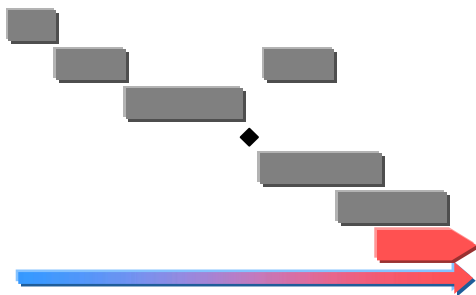
Secondary

Services : Transportation, road maintenance, communications



Yukon Flats Oil & Gas Development

Production Operations Manpower



Position	Number*
Production Supervisors	10-30
Production Operators	50-200
Roustabouts	20-60
Road Maintenance	5-15
Service such as mechanics, electricians	10-30
Caterers/Security	5-15
Total	100-350

* Dependent on size and types of development

Potential local hire in most/all positions

Yukon Flats Oil & Gas Development

Primary Contractors

- **Seismic**
 - PGS Onshore (907) 569-4049
 - Veritas DGC (907) 276-6037
- **Drilling**
 - Doyon Drilling (907) 563-5530
 - Nabors Alaska Drilling (907) 263-6000
 - Nordic Calista Services (907) 561-7458
- **Facilities and Pipeline Construction**
 - ASRC ES (907) 339-6200
 - NANA-Colt (907) 273-3900
 - H.C. Price (907) 278-4400
 - Udelhoven (907) 344-1577
 - VECO (907) 752-1500

Yukon Flats Oil & Gas Development

Secondary Service Providers

- Air Transport (All Phases)
 - ERA Aviation (907) 248-4422
 - Northern Air Cargo (907) 249-5161
 - Northwestern Arctic Air (907) 245-4566
 - Security Aviation (907) 248-2677
- Brushing and Clearing (Seismic, Pipeline Construction)
 - Local Equipment Construction/Contractors
- Camp Service Caterers (All Phases)
 - Doyon Universal Services (907) 522-1300
 - Kuupik/Arctic Catering (907) 562-5588
- Engineering (Facility and Pipeline Construction)
 - ASCG Incorporated (907) 339-6500
 - ASRC ES (907) 339-6200
 - Bristol Engineering & Environmental (907) 563-0013
 - CH2M Hill (907) 278-2551
 - NANA/Colt Engineering (907) 273-3900
 - VECO (907) 264-8100

Yukon Flats Oil & Gas Development

Secondary Service Providers

- Environmental and Permitting (Seismic, Pipeline & Facilities)
 - Bristol Environmental & Engineering (907) 563-0013
 - CH2M Hill (907) 278-2551
 - ENSR International (907) 561-5700
- Helicopter Services
 - Air Logistics of Alaska (907) 452-1197
 - ERA Aviation (907) 248-4422
 - Evergreen Helicopters (907) 257-1500
- Ice/Winter Road Construction (Drilling, Facilities Construction)
 - Alaska Interstate Construction (907) 562-2792
 - Peak Oilfield Service Company (907) 263-7000
- Inspection Services
 - ASRC ES (907) 339-6200
- Instrumentation (Facilities Construction and Operations)
 - Udelhoven Oilfield Systems Services (907) 344-1577

Yukon Flats Oil & Gas Development

Secondary Service Providers

- **Revegetation (Pipeline Construction)**
 - Local Road and Landscaping Contractors
 - Great Northwest , Inc (907) 452-5617
- **Road and Pad Construction and Maintenance (All Phases)**
 - Local Road Building Contractors
 - Alaska Interstate Construction (907) 562-2792
 - Great Northwest , Inc (907) 452-5617
 - Peak Oilfield Services Company (907) 263-7000
 - SKW/Eskimos (907) 339-6700
- **Steel fabricators(Drilling, Facility & Pipeline Construction, Operations)**
 - Alaska Steel Co. (907) 561-1188
 - STEELFAB (907) 264-2819
- **Surveying (Seismic, Pipeline & Facilities Construction)**
 - Kuukpik-LCMF (907) 273-1830
 - Lounsbury and Associates (907) 272-5451
 - F. Robert Bell & Associates Inc. (907) 274-5257

Yukon Flats Oil & Gas Development

Secondary Service Providers

- **Trucking (All Phases)**
 - Carlyle Transportation (907) 267-7797
 - Lyndon Transport (907) 245-1544
 - Oilfield Transport (907) 229-9647
 - Weaver Brothers (907) 283-7975
- **Welding X-ray Services (Pipeline and Facilities Construction)**
 - Kakivik Asset Management (907) 770-9400